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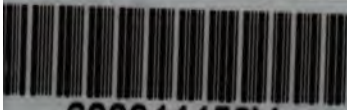
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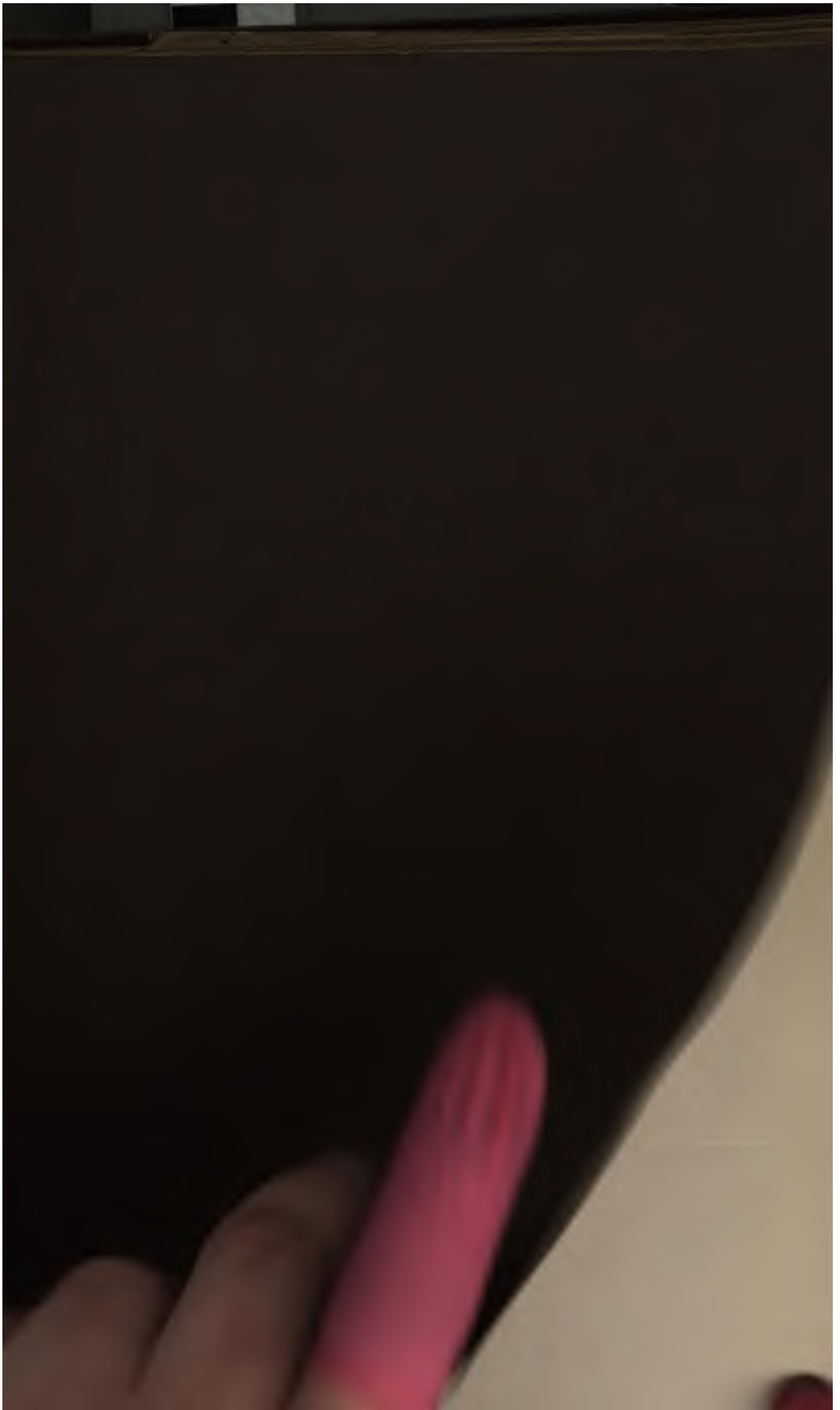
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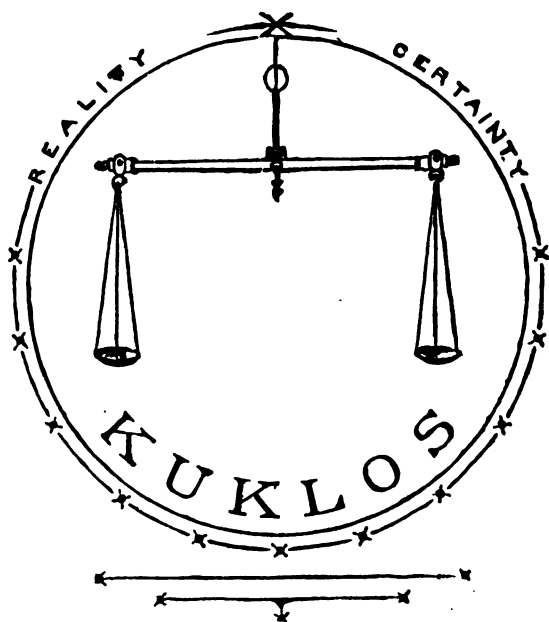
1831

C

d

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THE CIRCLE
AND
STRAIGHT LINE.



PLATES.

PLATES
OF
CONSTRUCTIONS AND DIAGRAMMS
ILLUSTRATING
THE CIRCLE.
AND
STRAIGHT LINE.

BY
JOHN HARRIS.



MONTREAL: OCTOBER, 1875.

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- “ 22. Fig. 29. { Resolution of the complete circle into
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Plate 1 (b.)

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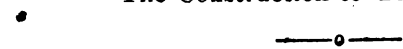
The Construction to the Fundamental Proposition.

PART FIRST, Page 24.

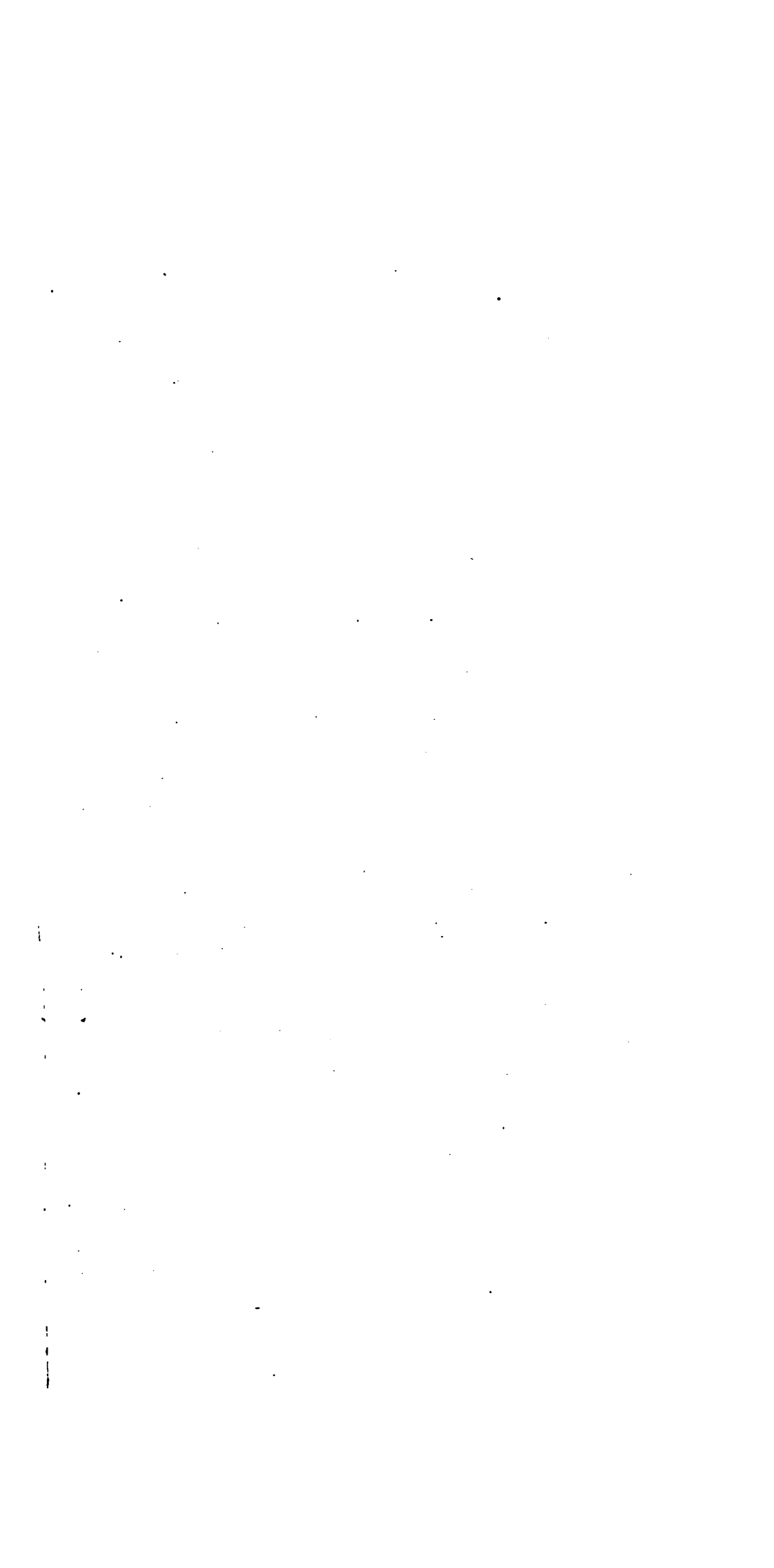
Plate 7 (a).

FIG. 3.

The Construction to Proposition A.



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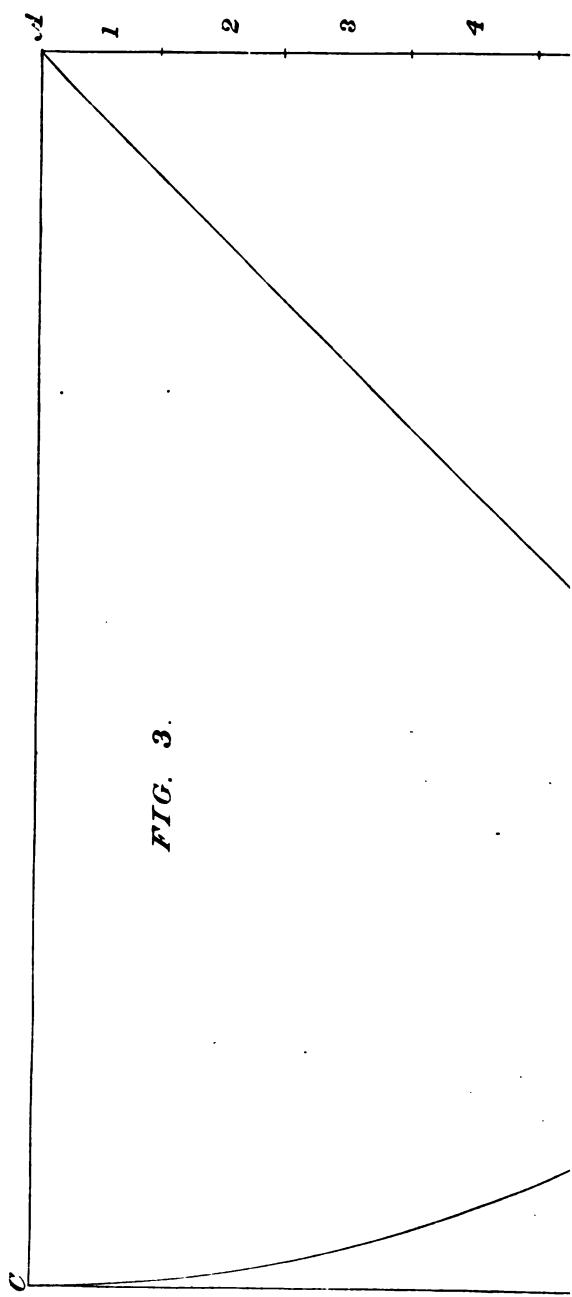
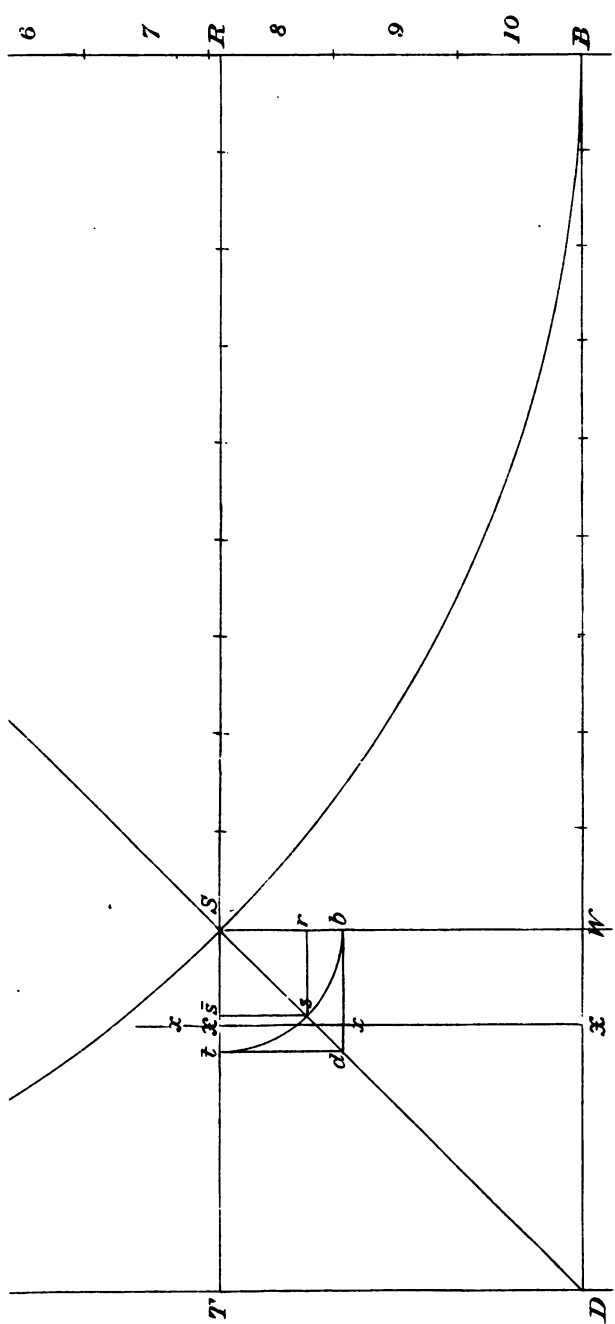


FIG. 3.



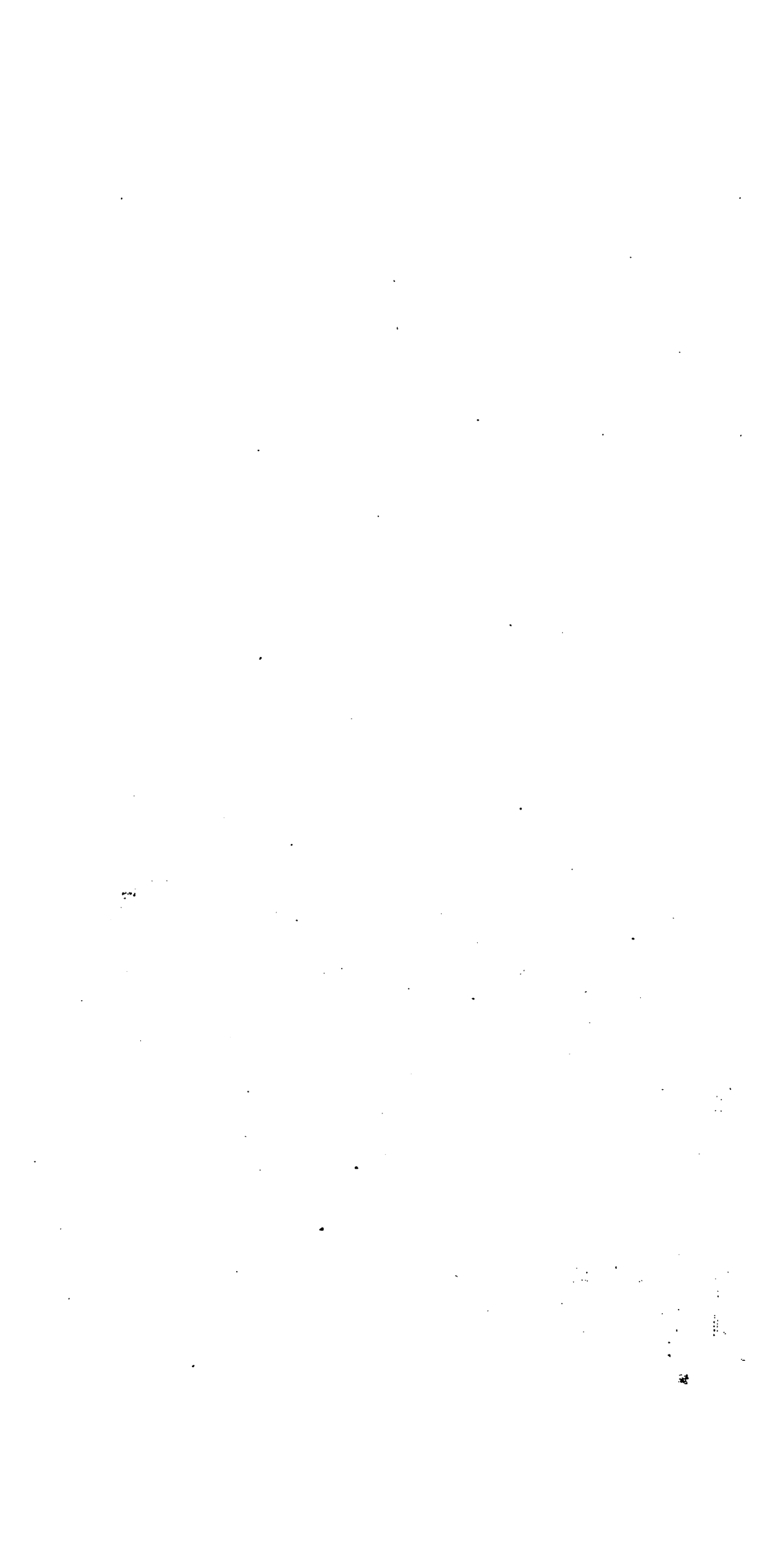


Plate 2.

FIG. 4.

The Construction to Proposition *B*.

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FIG. 4

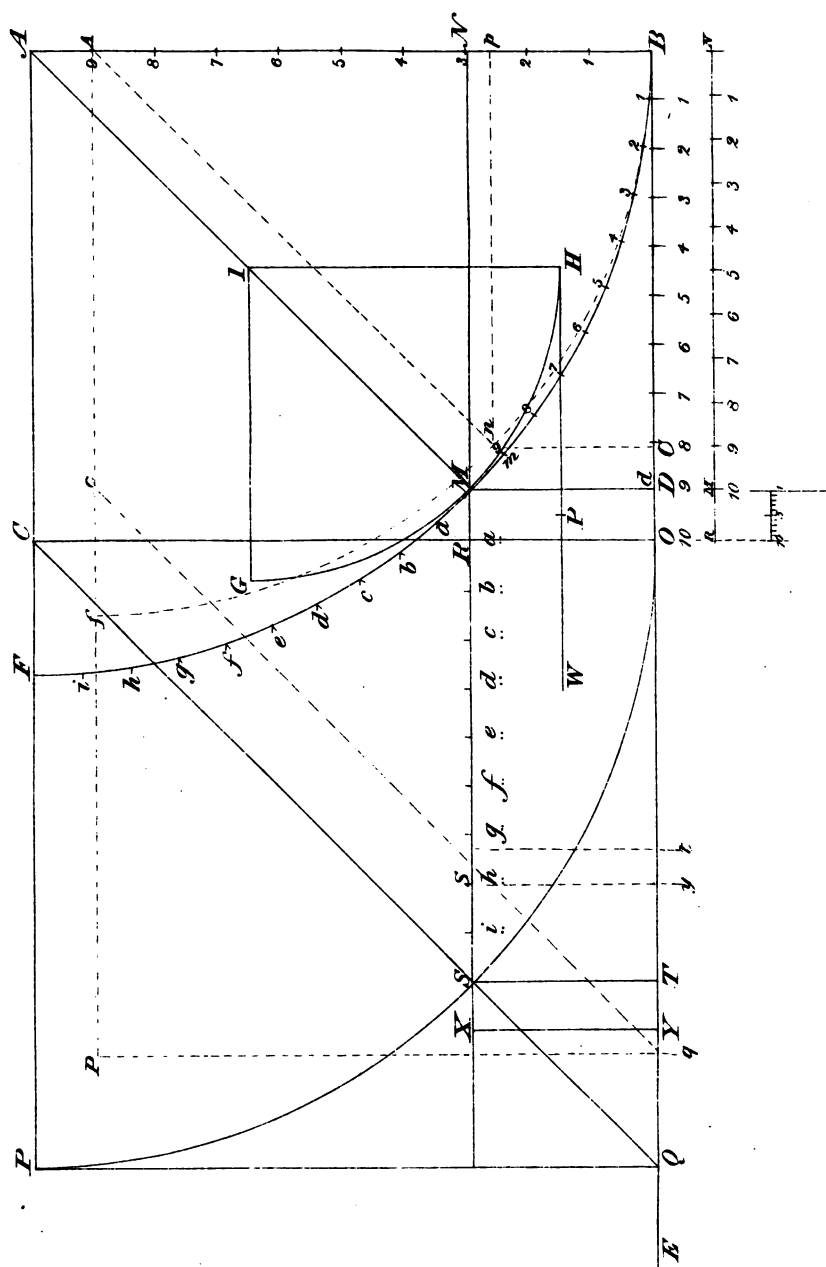
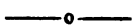


Plate 3 (a).

FIG. 5.

The Construction to Proposition *C*.



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Plate 3 (b).

FIG. 5 *R.*

The Construction to the Supplements to Prop. *C.*

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FIG. 5^R

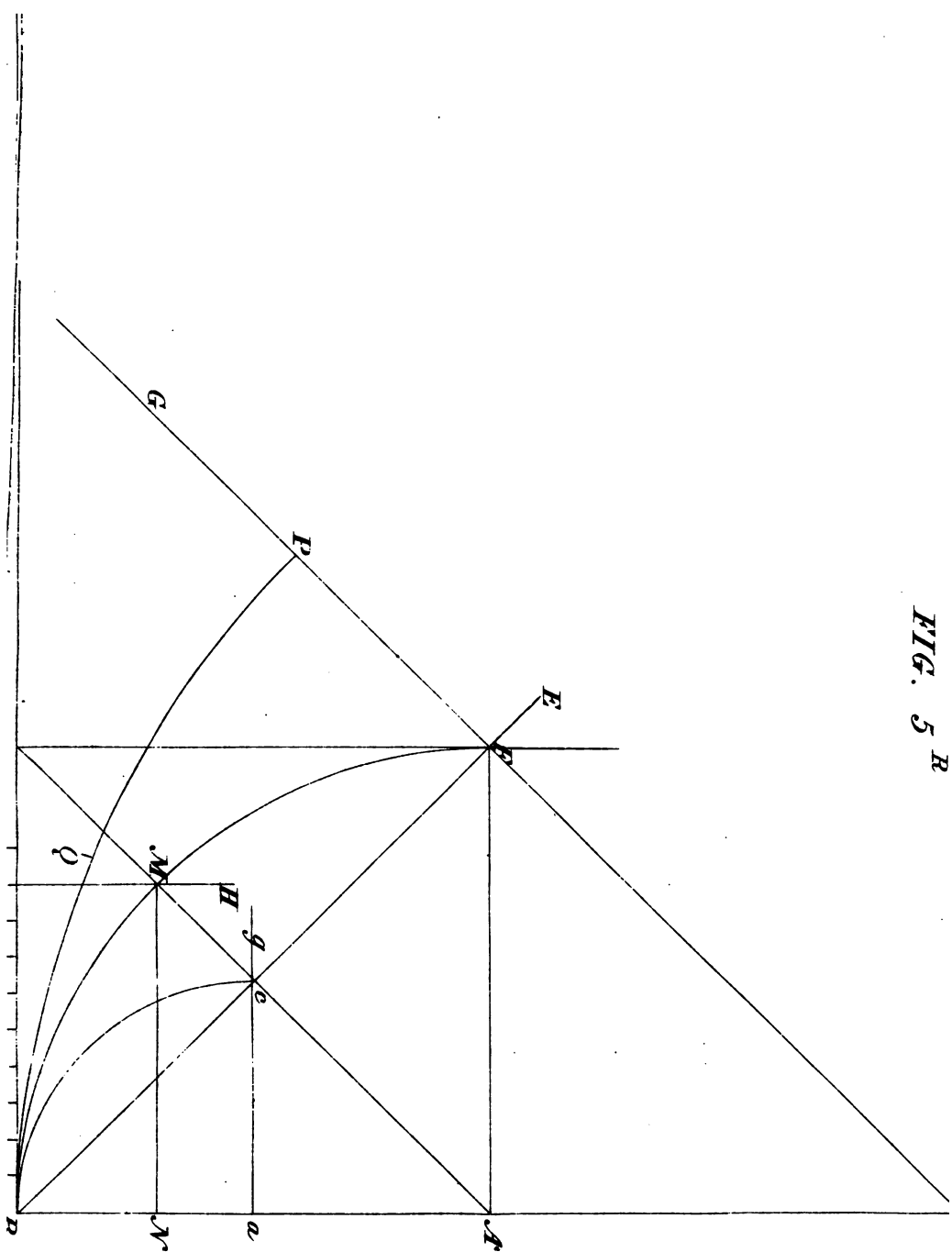
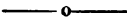


Plate 4.

FIG. 6.

The Construction to Proposition *D*.



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Plate 5.

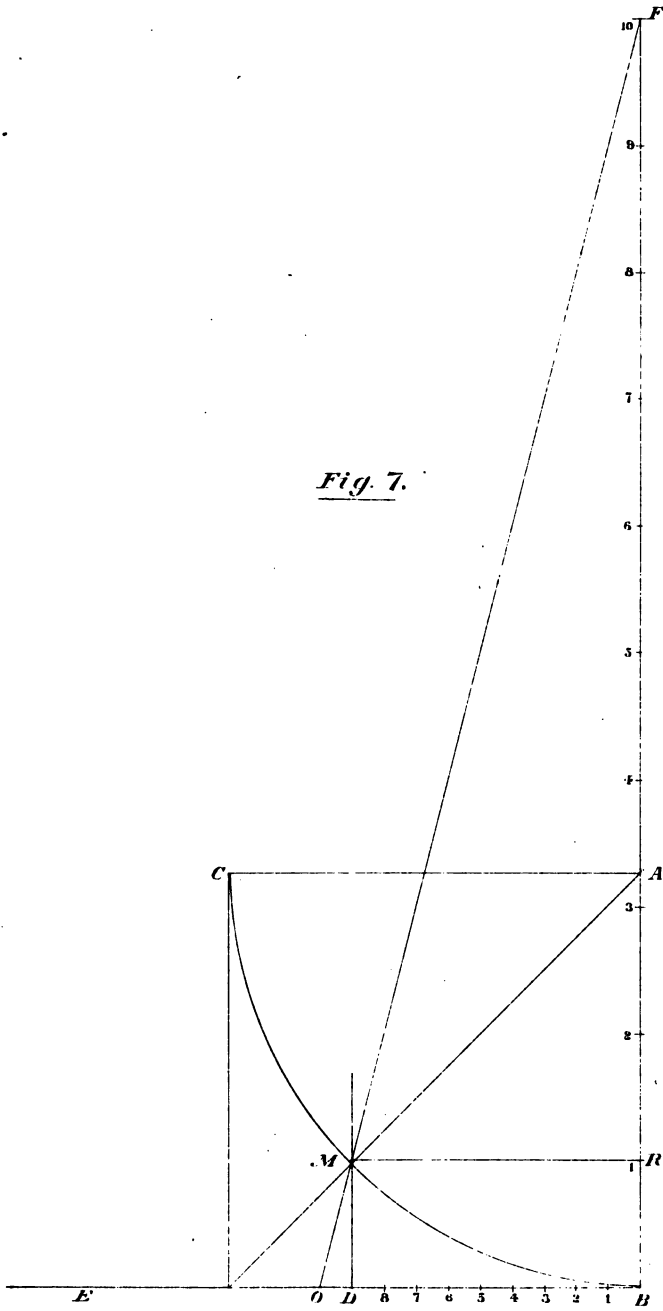
FIG. 7.

The Construction to Proposition *E*.

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Fig. 7.



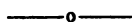
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Plate 6.

FIG. 10 and 11.

The Fundamental Construction developed.



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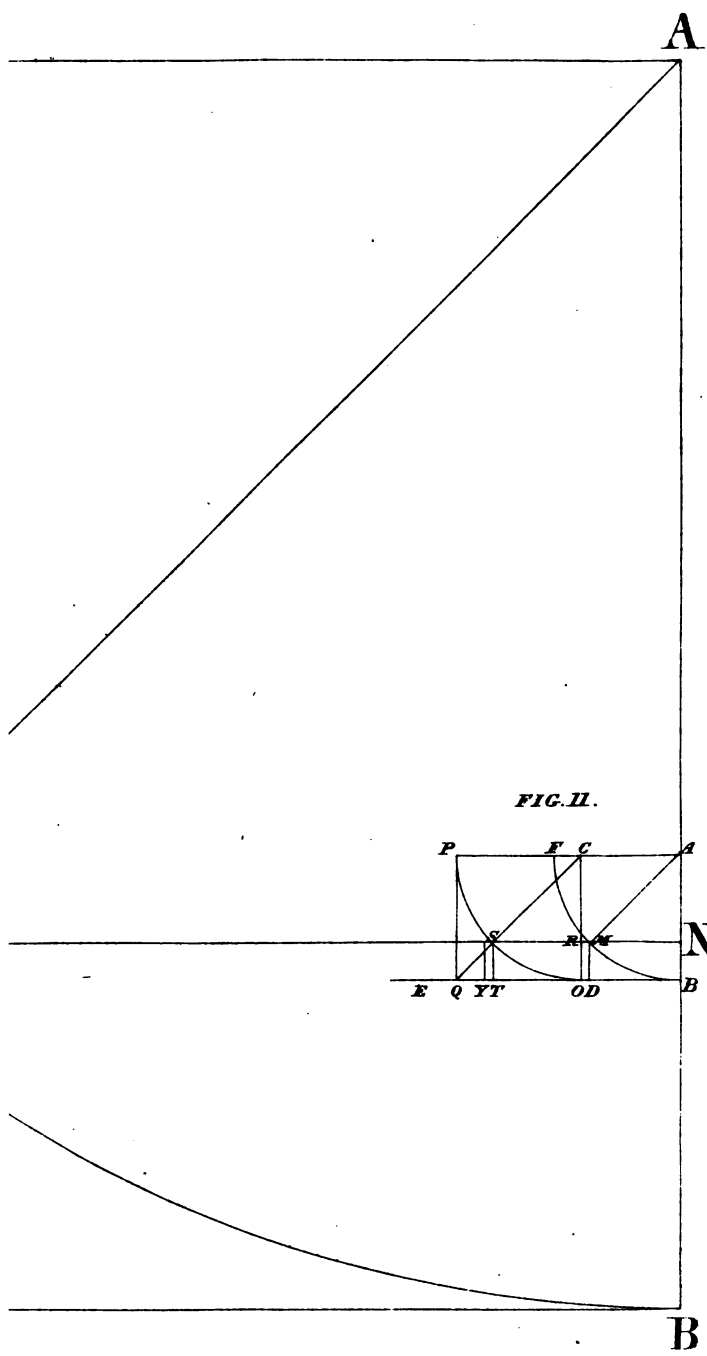
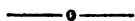


Plate 7.

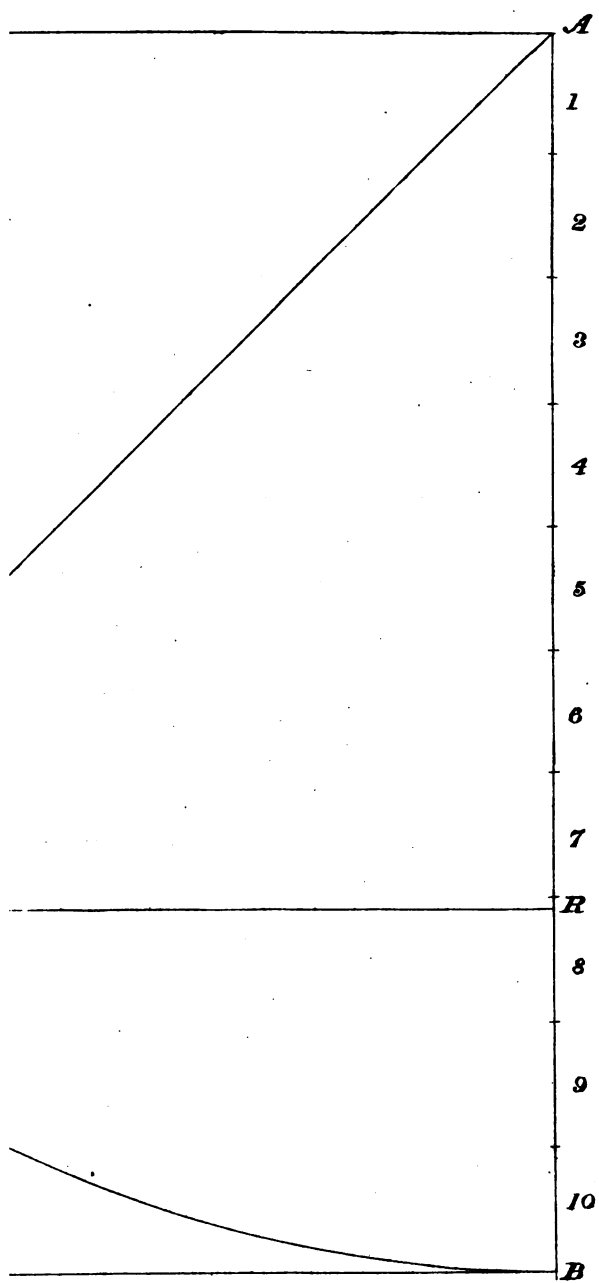
FIG. 12 (*a*).

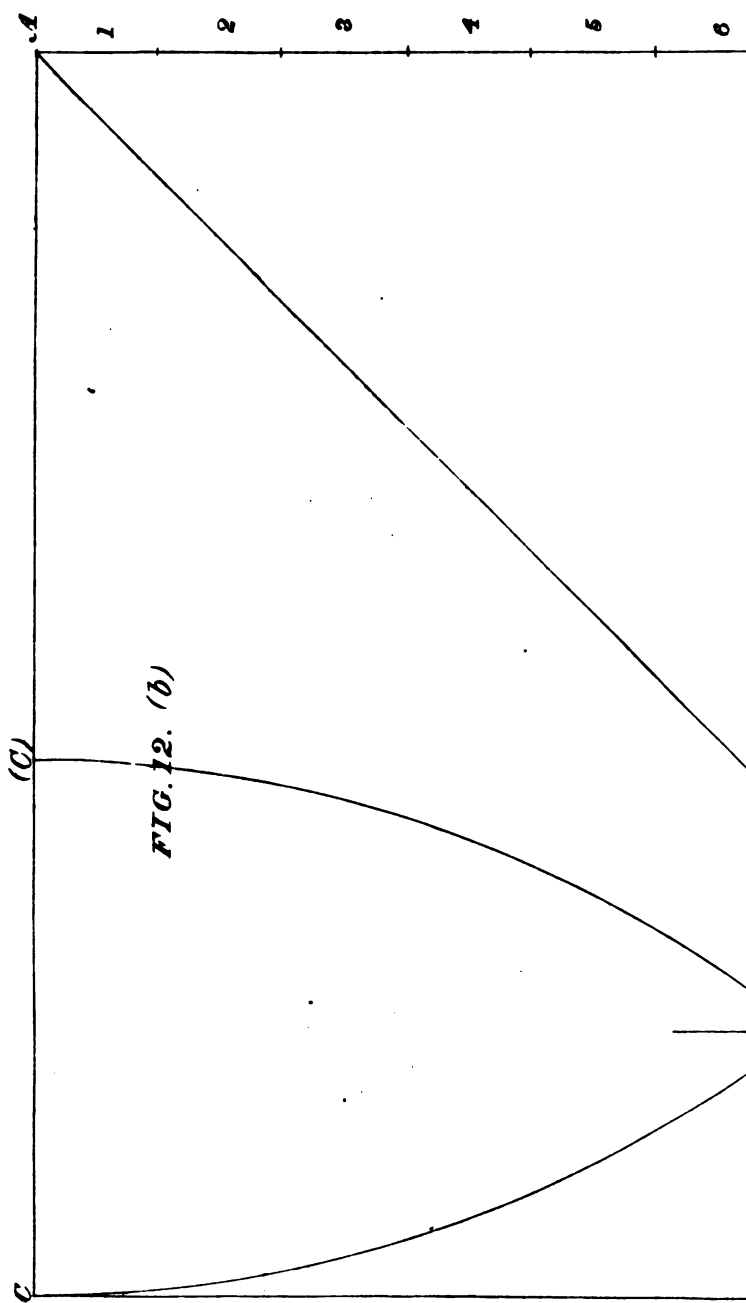
Analytical Construction.



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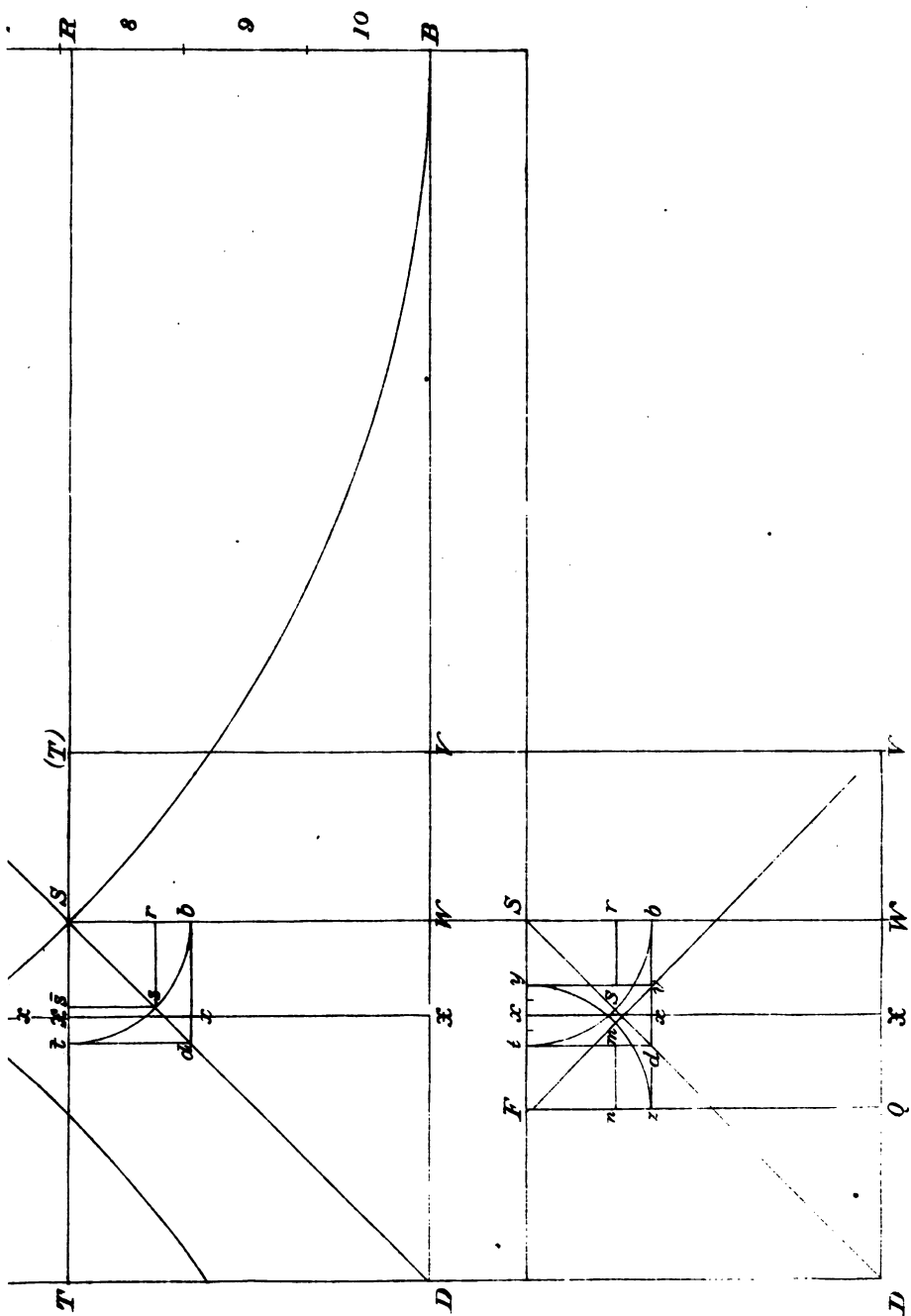


Plate 9.

FIG. 13.

Analytical Construction.



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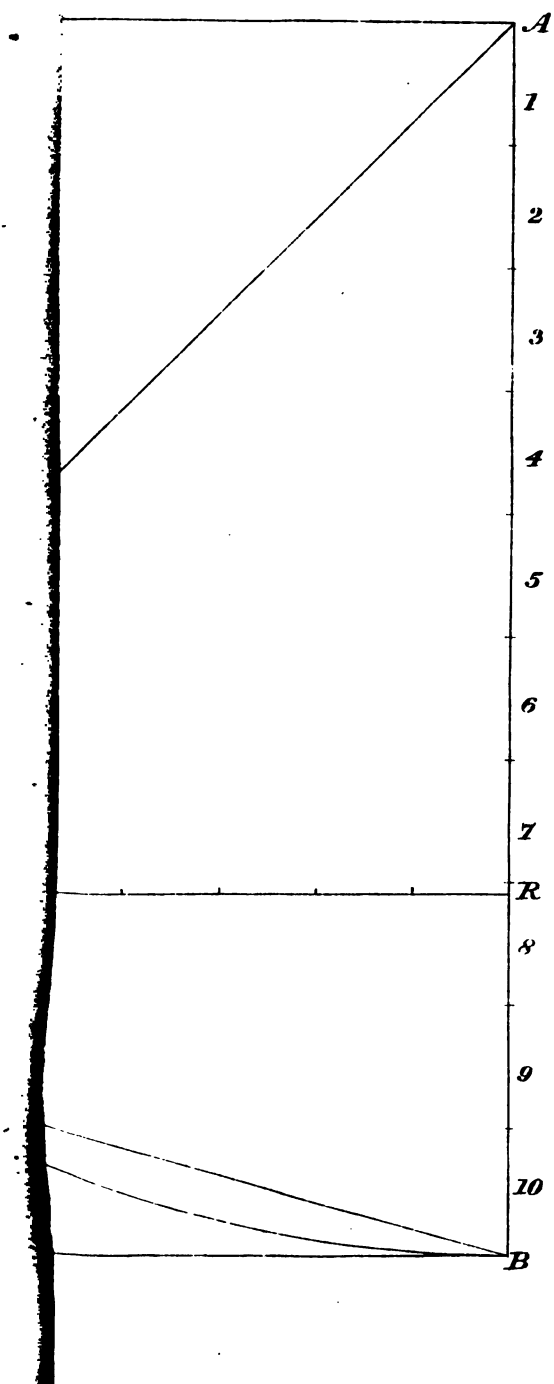
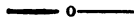


Plate 10.

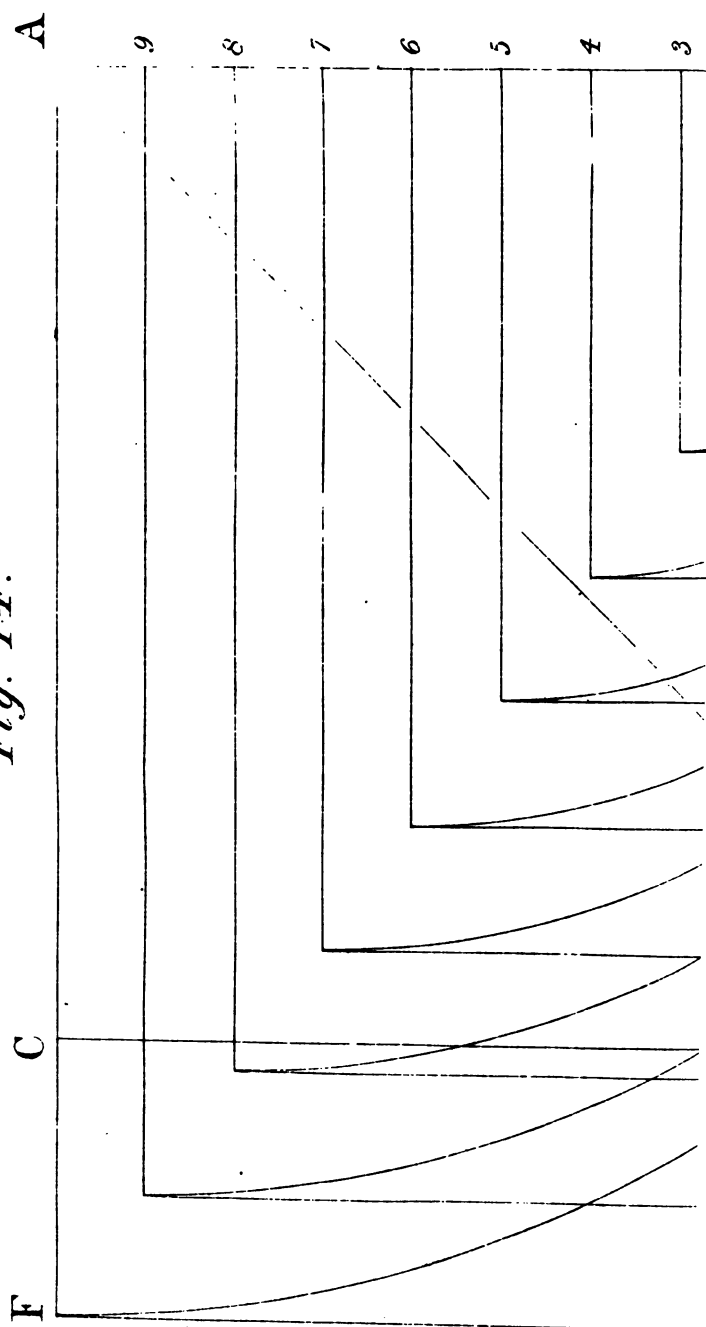
FIG. 14.

Analytical Construction.



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Fig. 14.



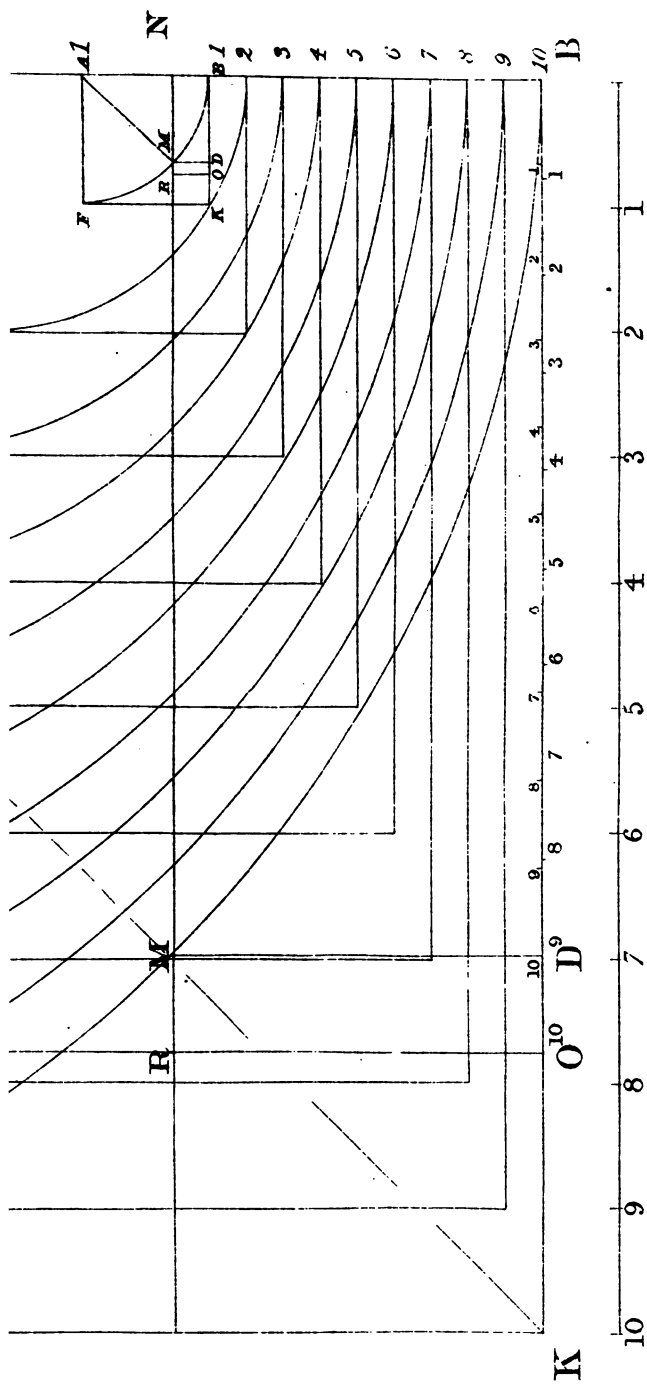
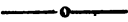




Plate 12.

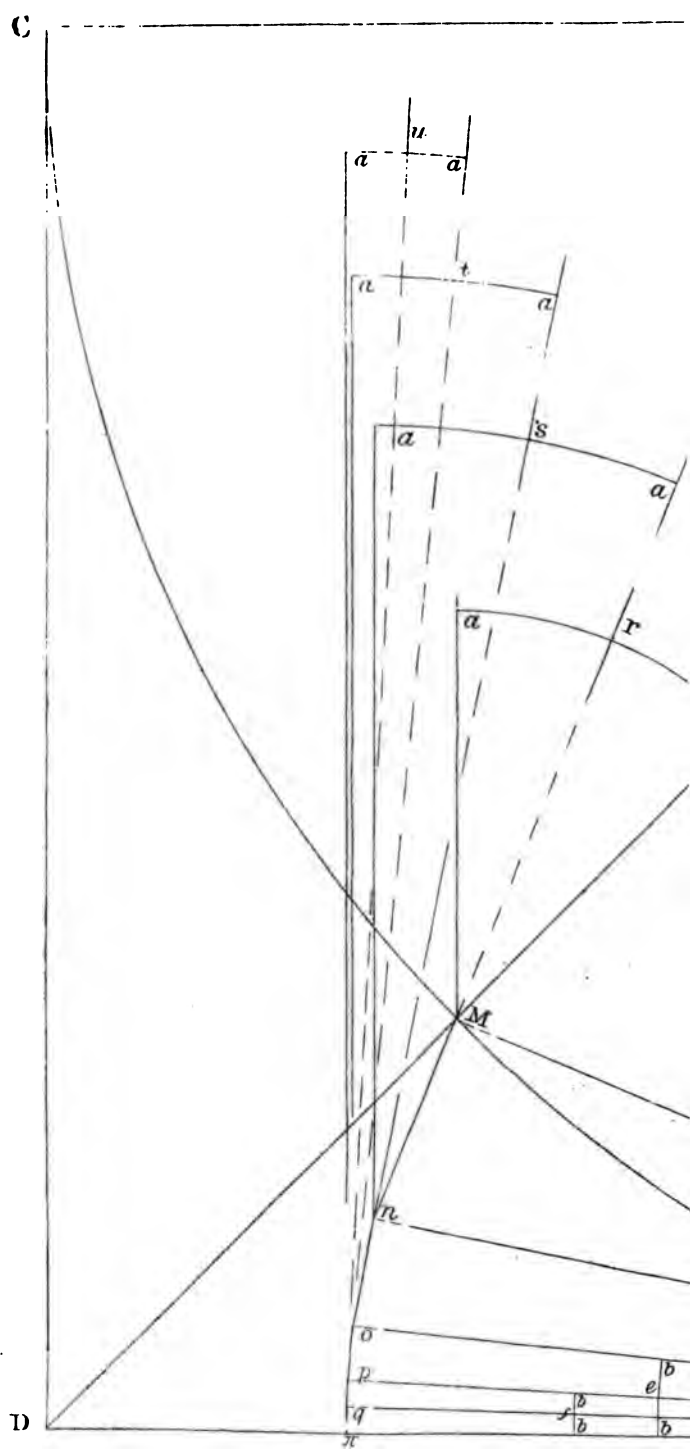
FIG 20.

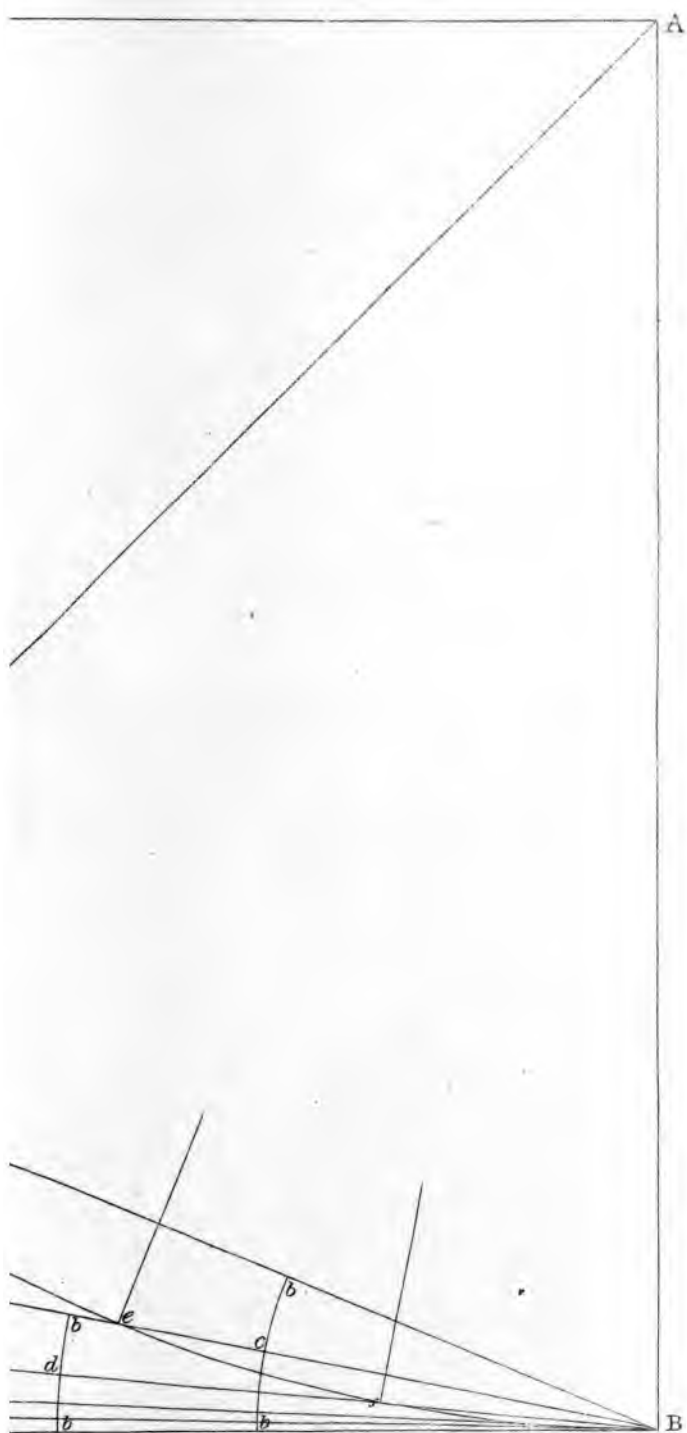
**The radial duplication of
the bisected arc.**



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Plate 13.

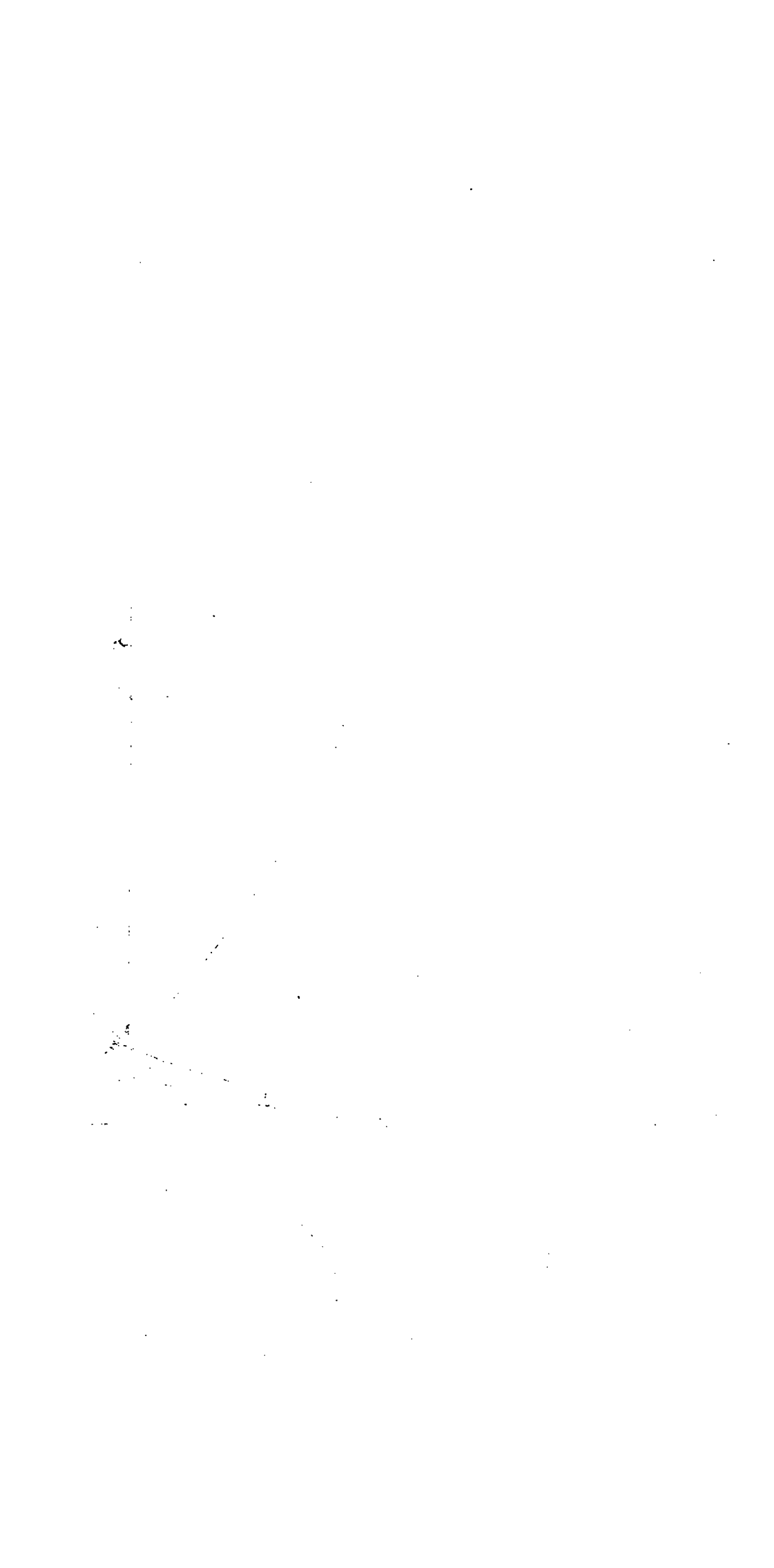
(1.) FIG. 20 R.

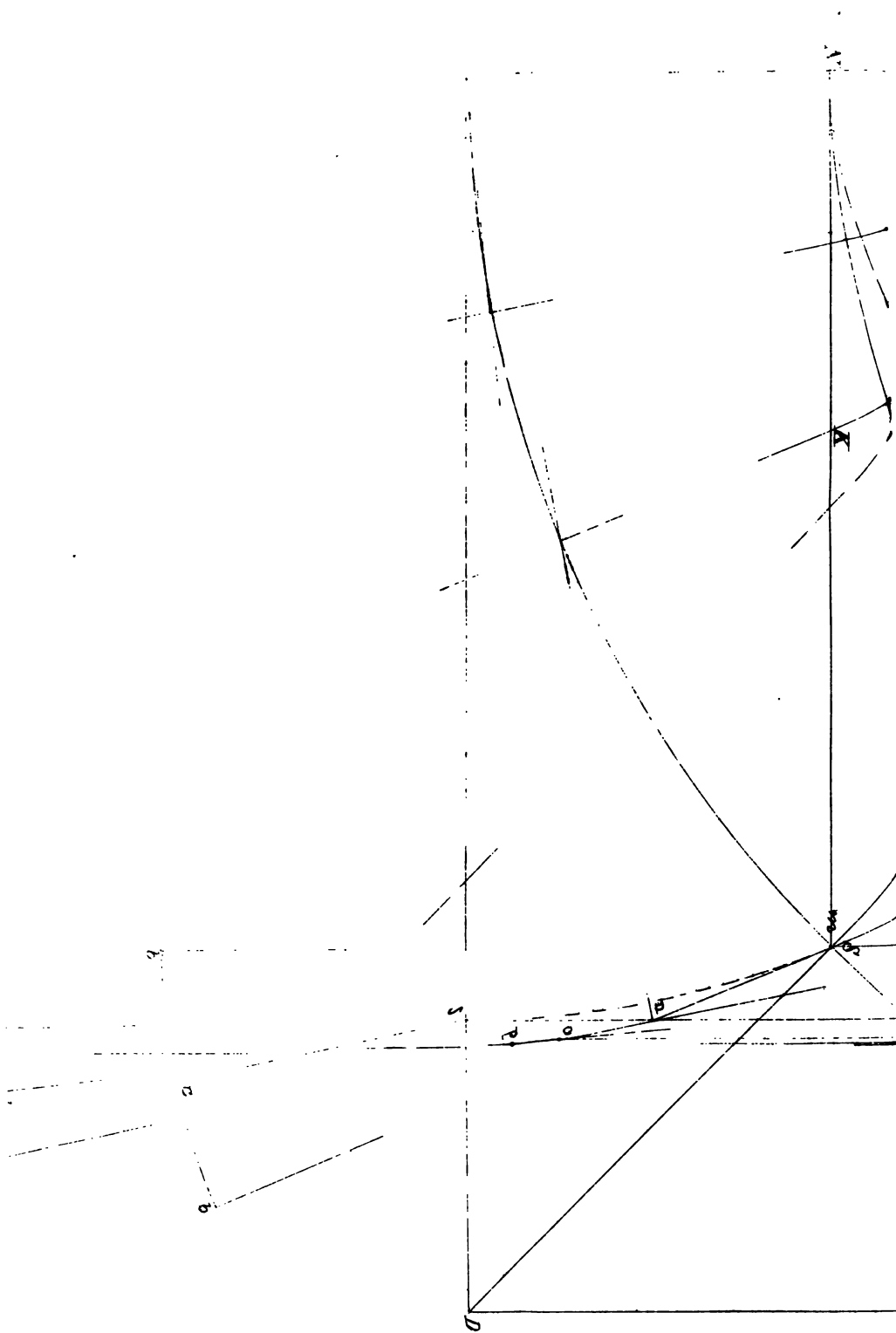
Radial Duplication of the Bisected Arc.

—o—

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(And Supplement to Part Third.)





1-FIG. 20. (B)

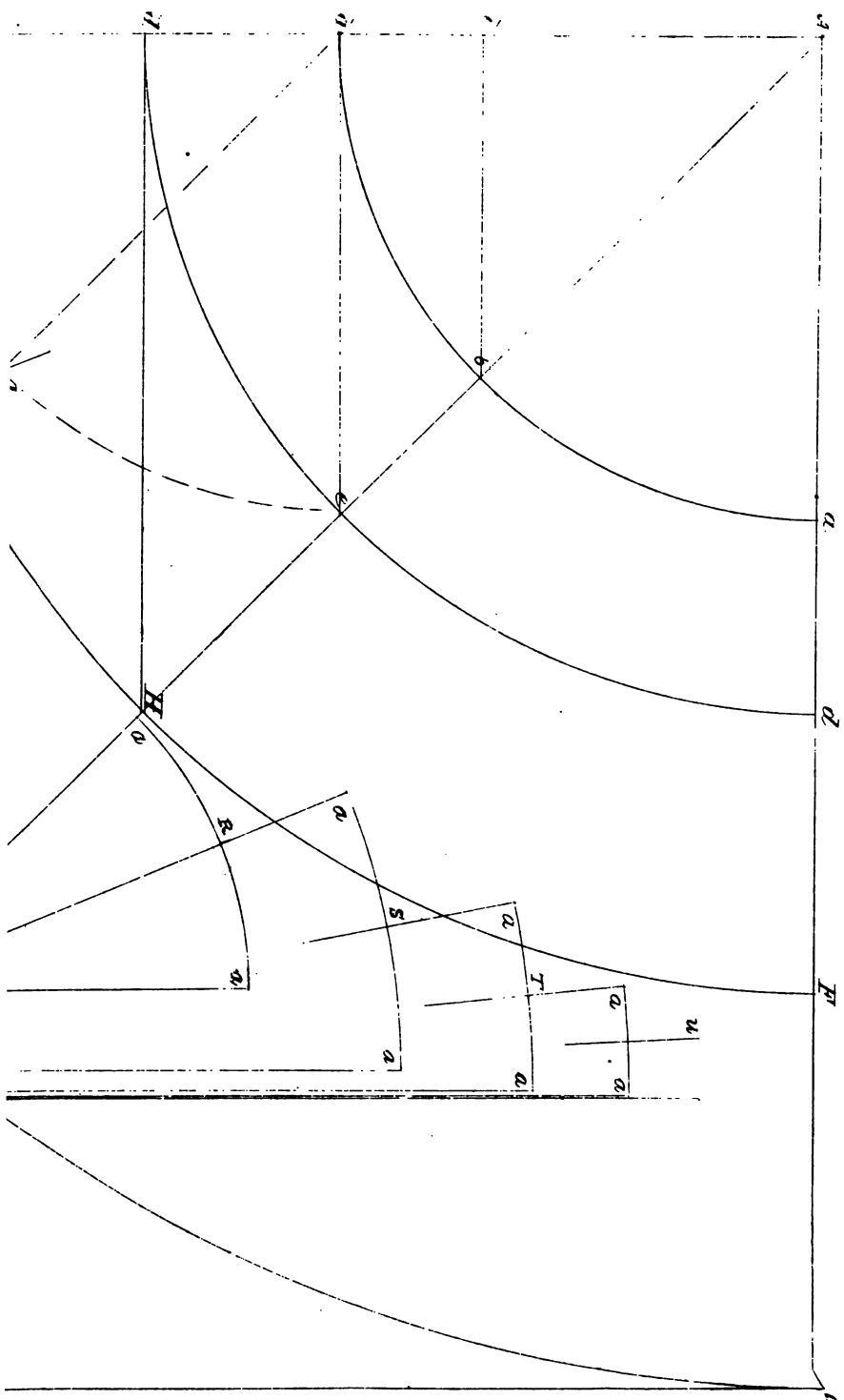


Plate 14.

(2.) FIG. 20 R.

Analytical Examination of
the Arc of increasing Curvature.

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Plate 16.

FIG. 22.

Radial duplication of the bisected arc, and
the Comp. Arc of curvature.

—o—

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(And Supplement.)

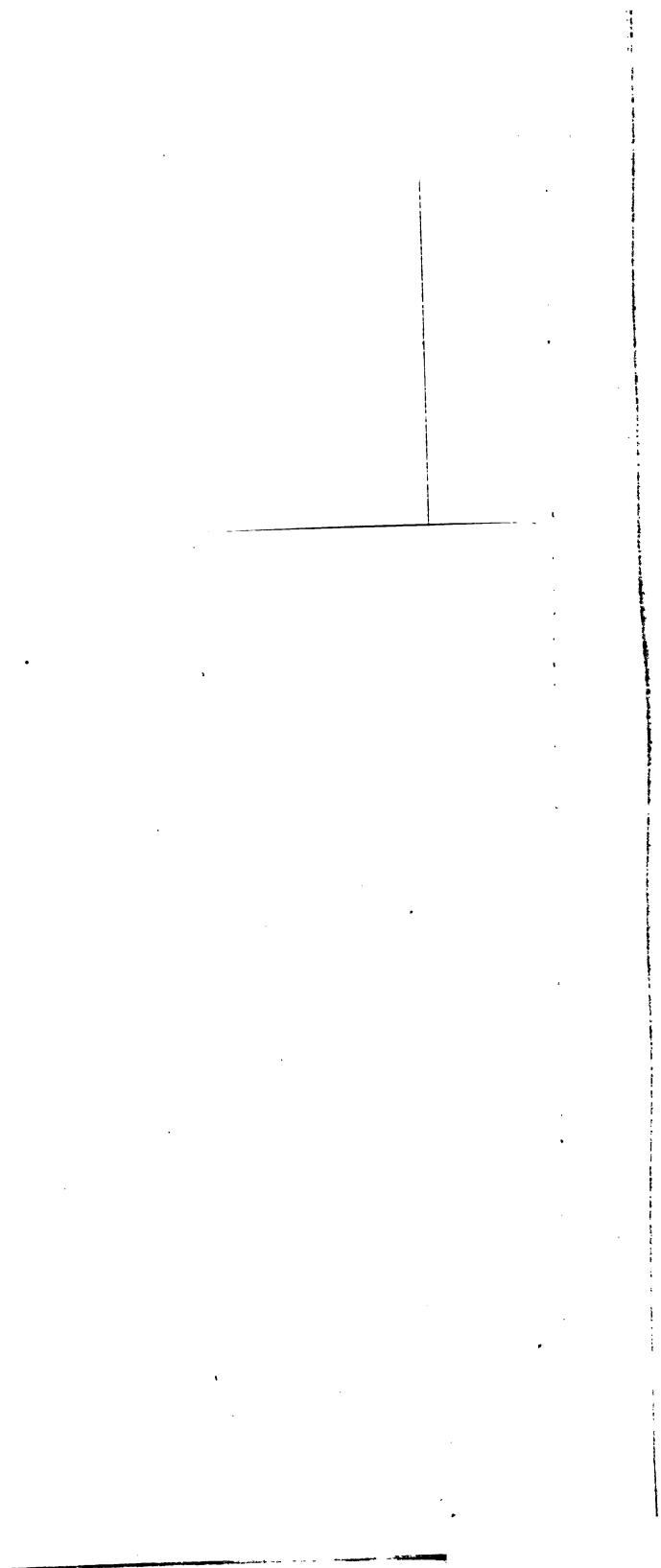
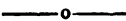


Plate 15.

FIG. 21.

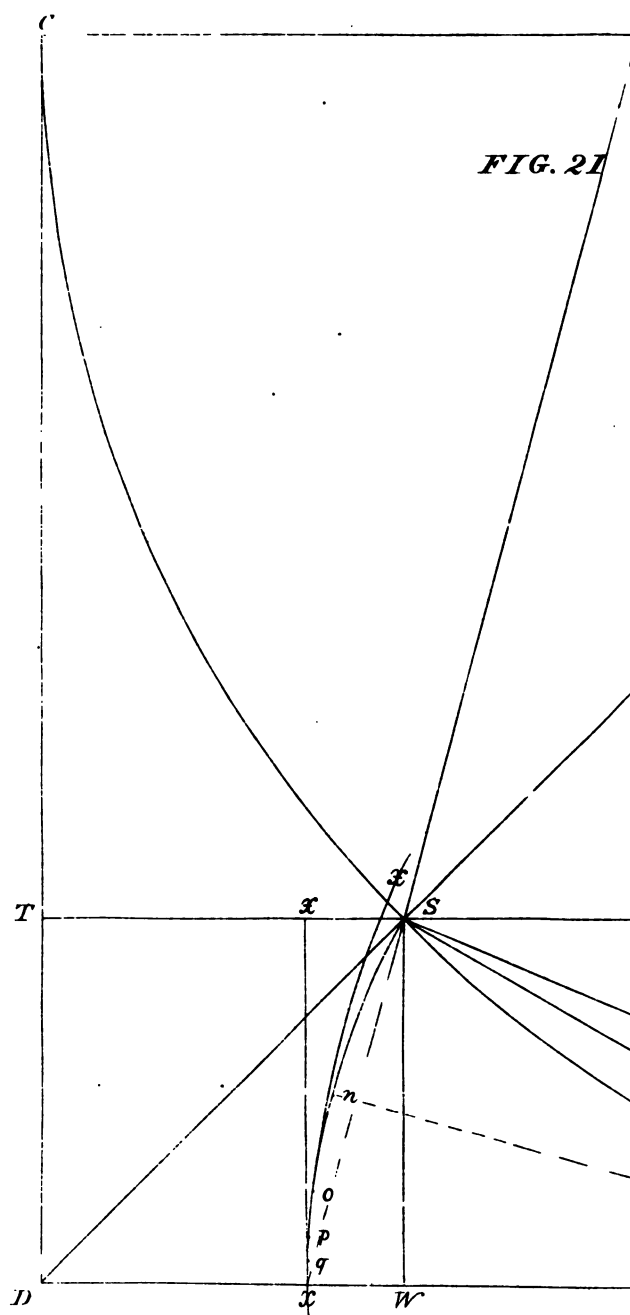
Arc of the arc-length. Comp. Arc of Curvature.
Arc of the Ultimate-Sine.



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(And Supplement.)





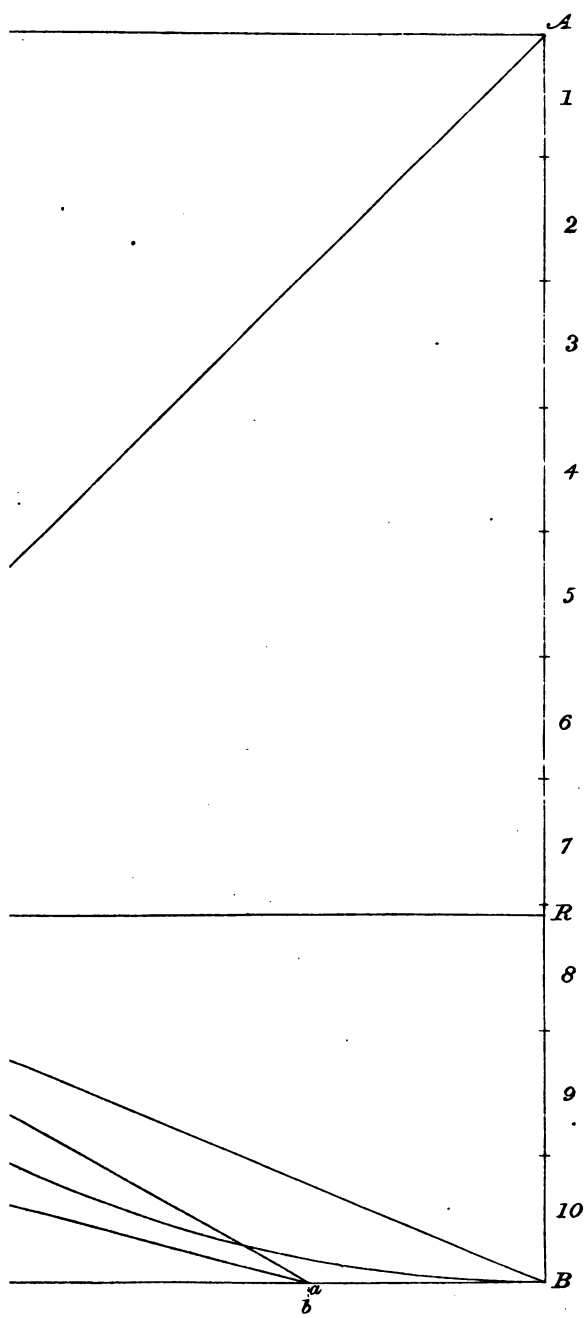
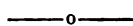


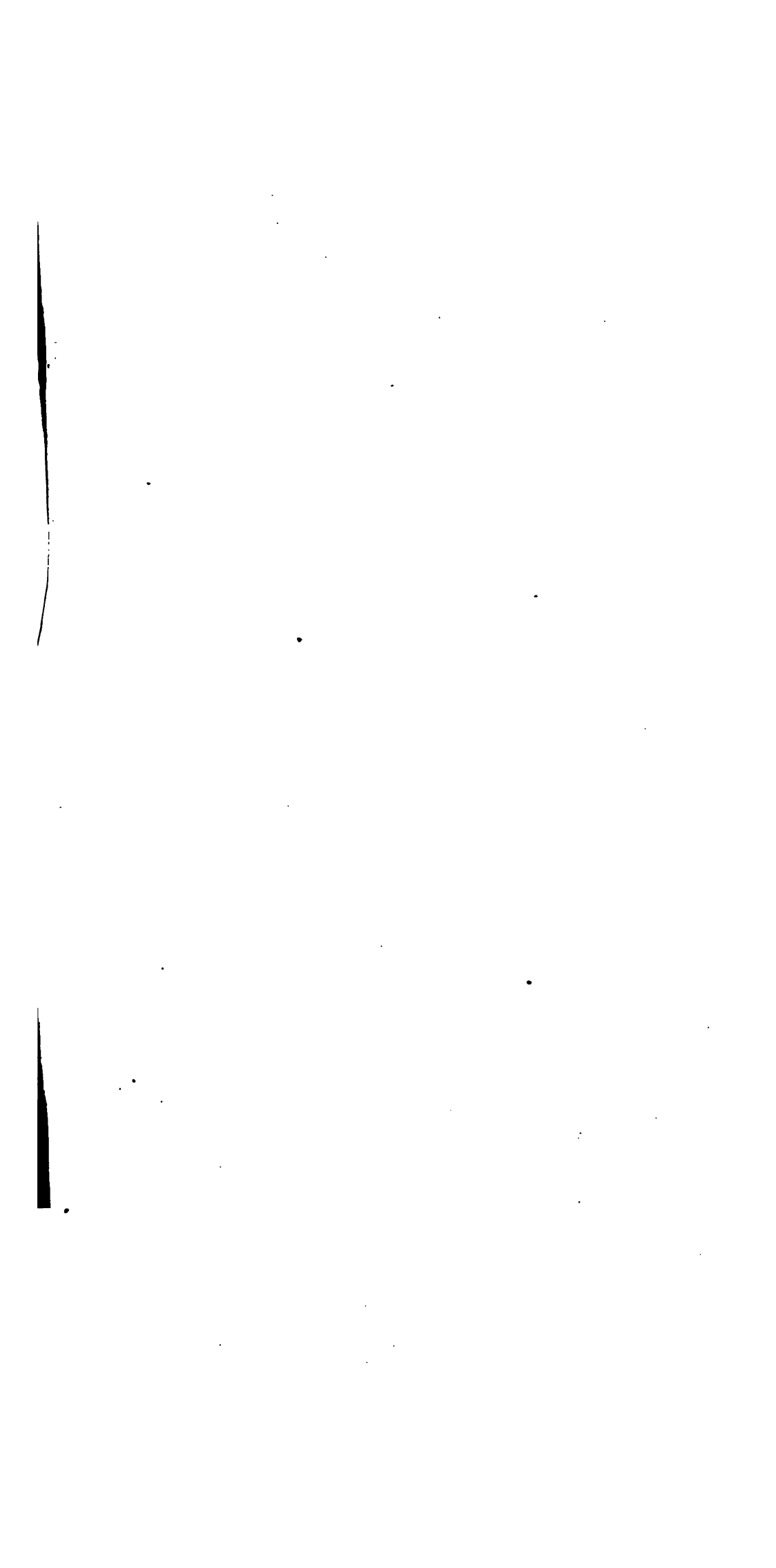
Plate 17.

FIG. 23.

The Tangential Line *B.D.*



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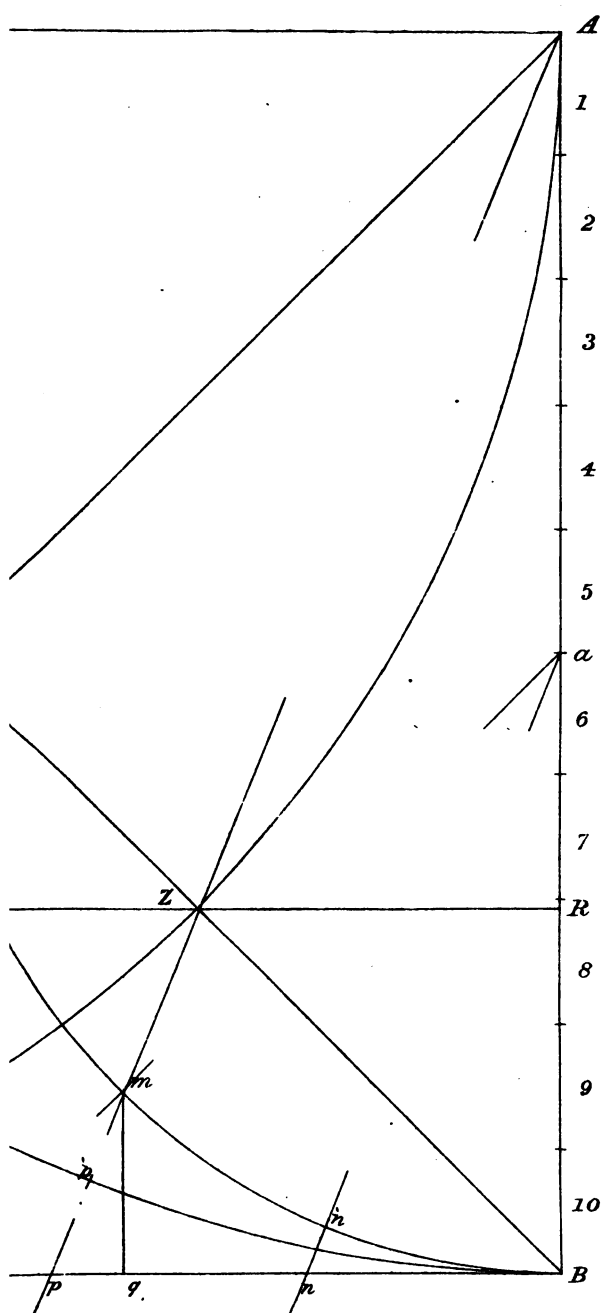




Plate 18.

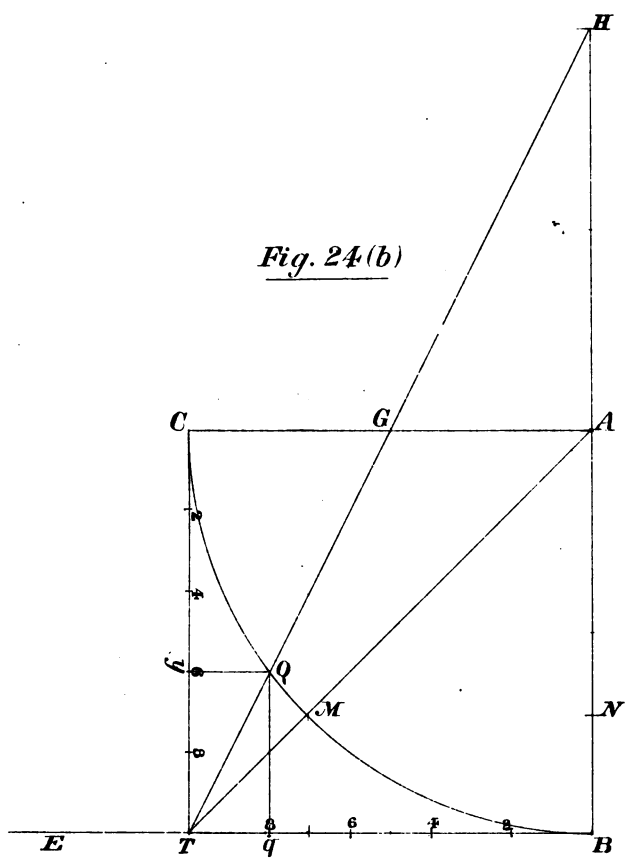
FIG. 24.

The Relation of the Octuple Arc.

—o—

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Fig. 24 (b)



The Octuple Arc $B.Q$. The Sextuple Arc $C.Q$.

Plate 19.

FIG. 25.

**The Relation of the Versed Sine to the arc-length of the
Octant.**

—o—

PART THIRD, page 17.

See also Part Second, page 11.)

Plate 19 (2).

FIG. 25 *R.R.* (1).

Analytical Construction.

*The Decimal Correlation of the Tangent, Sine, Versed
Sine, and Radius, of the Octant.*

—o—

PART SECOND, Page 13.

Plate 19 (3).

FIG. 25 *R.R.* (2).

Analytical Construction.

*The Decimal Correlation of the Tangent, Sine, Versed
Sine, and Radius, of the Octant.*

—o—

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Plate 20.

FIG. 27

Decurvature of the Semi-circle.

—o—

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‡ (And Supplement.)

Plate 20.

FIG. 27

Decurvature of the Semi-circle.

—o—

PART SECOND, Page 71.

‡ (And Supplement.)

—

Plate 21.

FIG. 28.

Decurvature of the Semi-circle.

—o—

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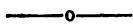
(And Supplement.) ,

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Plate 22.

FIG. 29.

Resolution of the complete circle into two straight lines.



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(And Supplement.)

Plate 23.

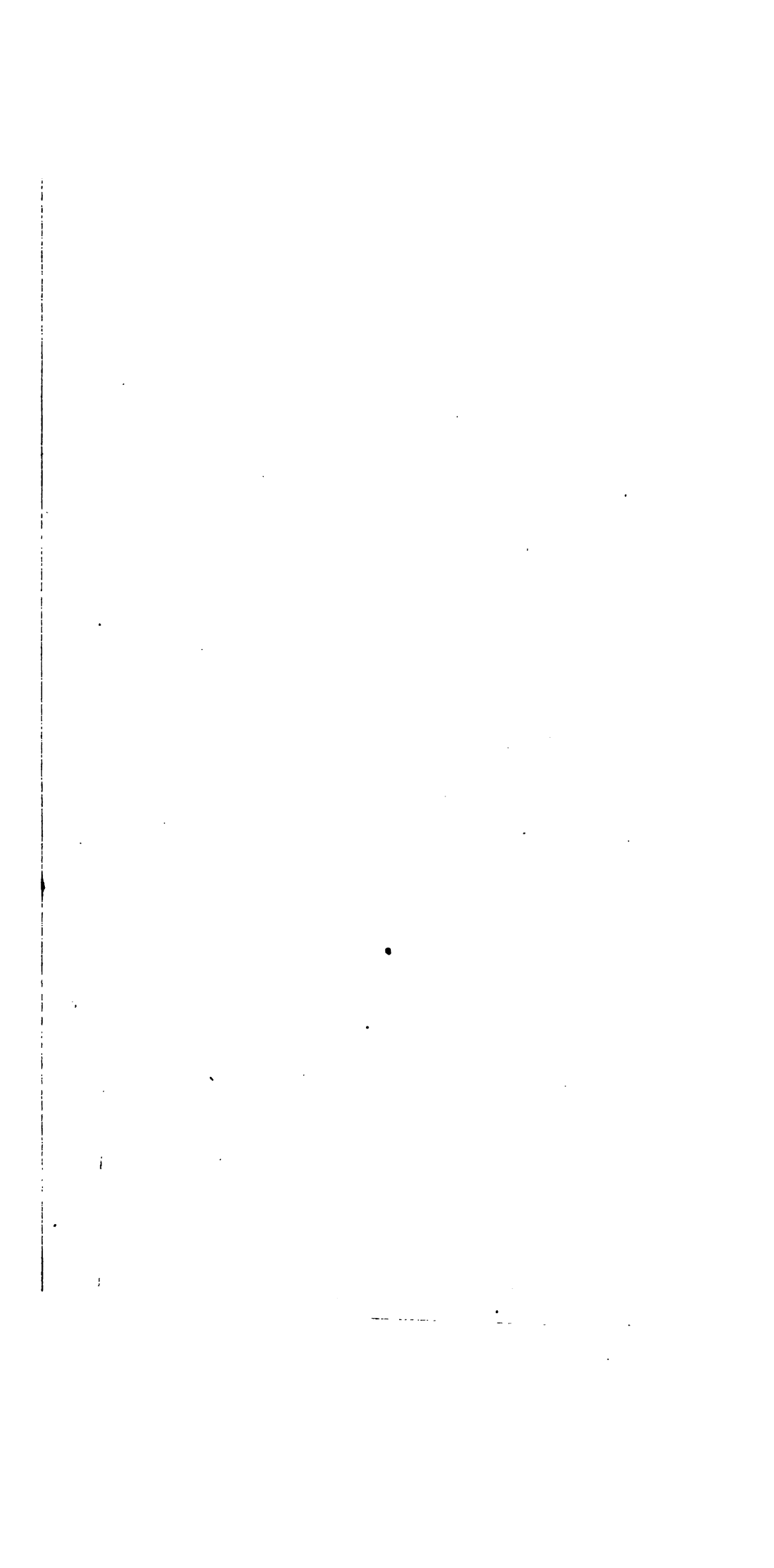
FIG. 30.

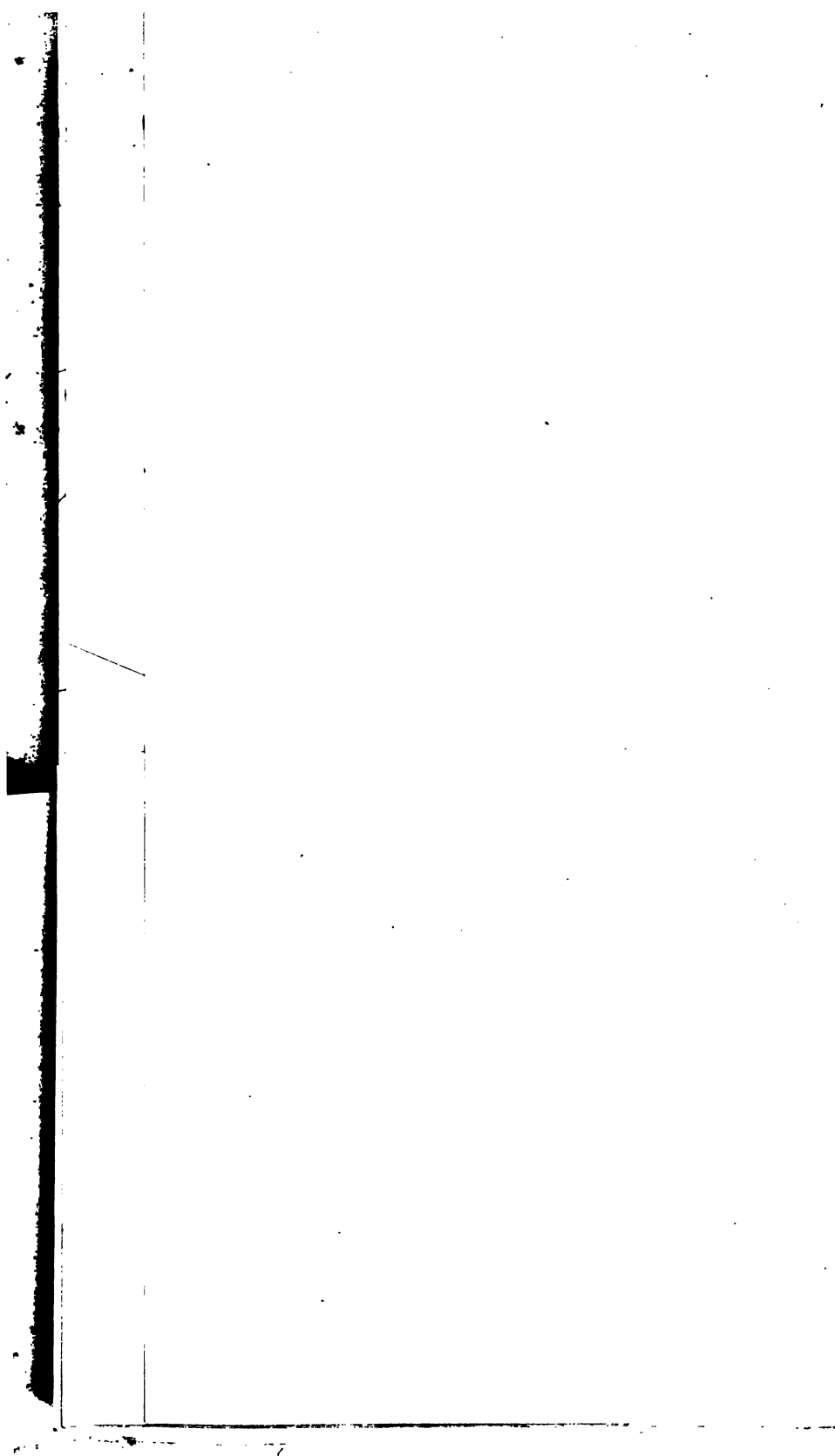
Analysis and Synthesis of the Circle.

—o—

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(And Supplement.)





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Plate 24.

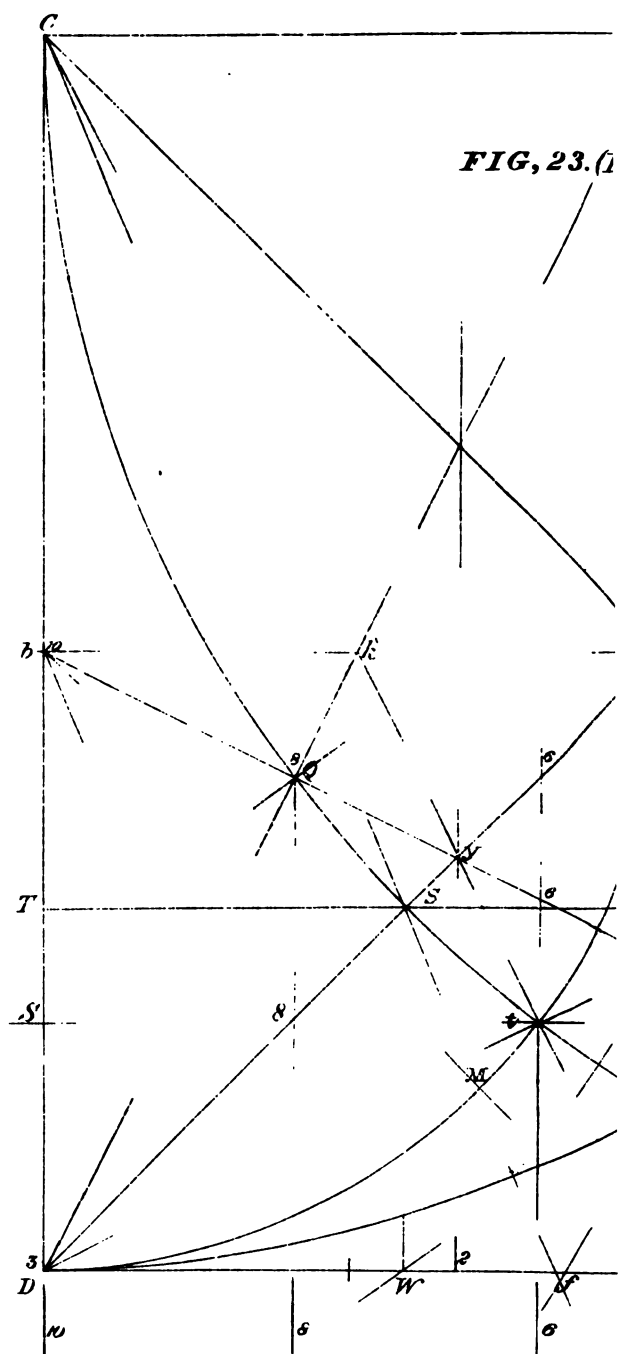
FIG. 23, *R*.

Analytical Examination. The Arc of 30 deg.

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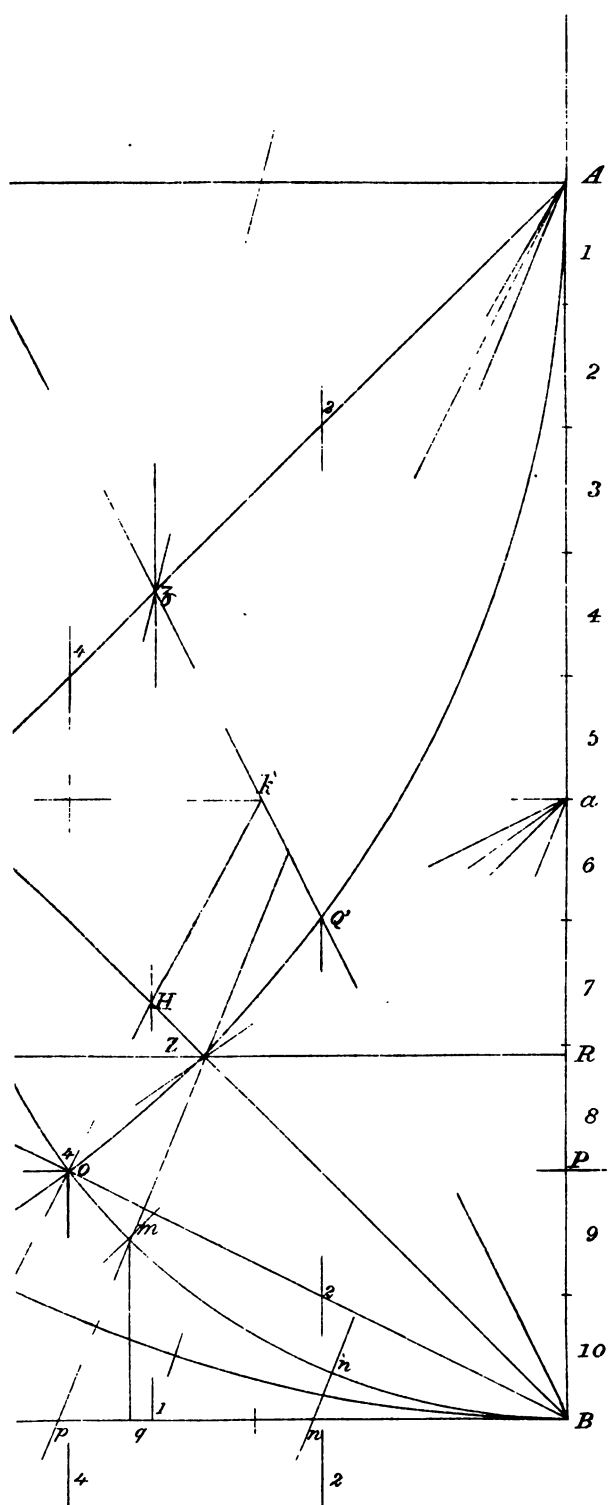


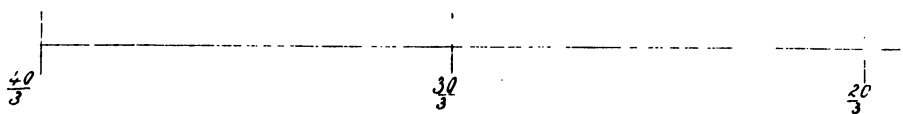
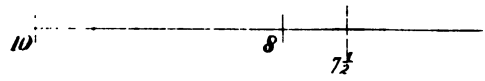
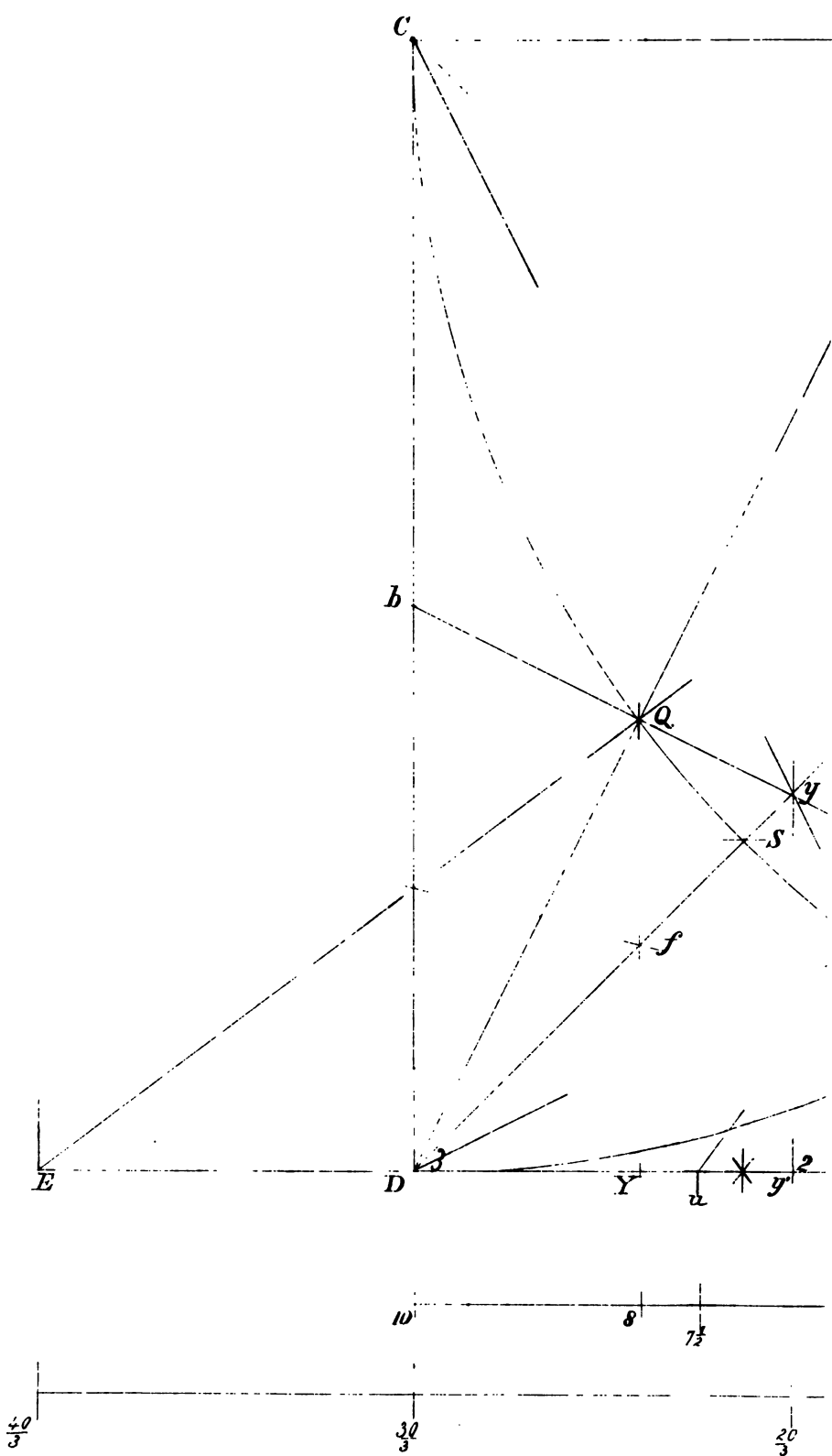
Plate 25.

FIG 24, (R.)

Analytical Examination. The Octuple Arc.

—o—

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24. (R)

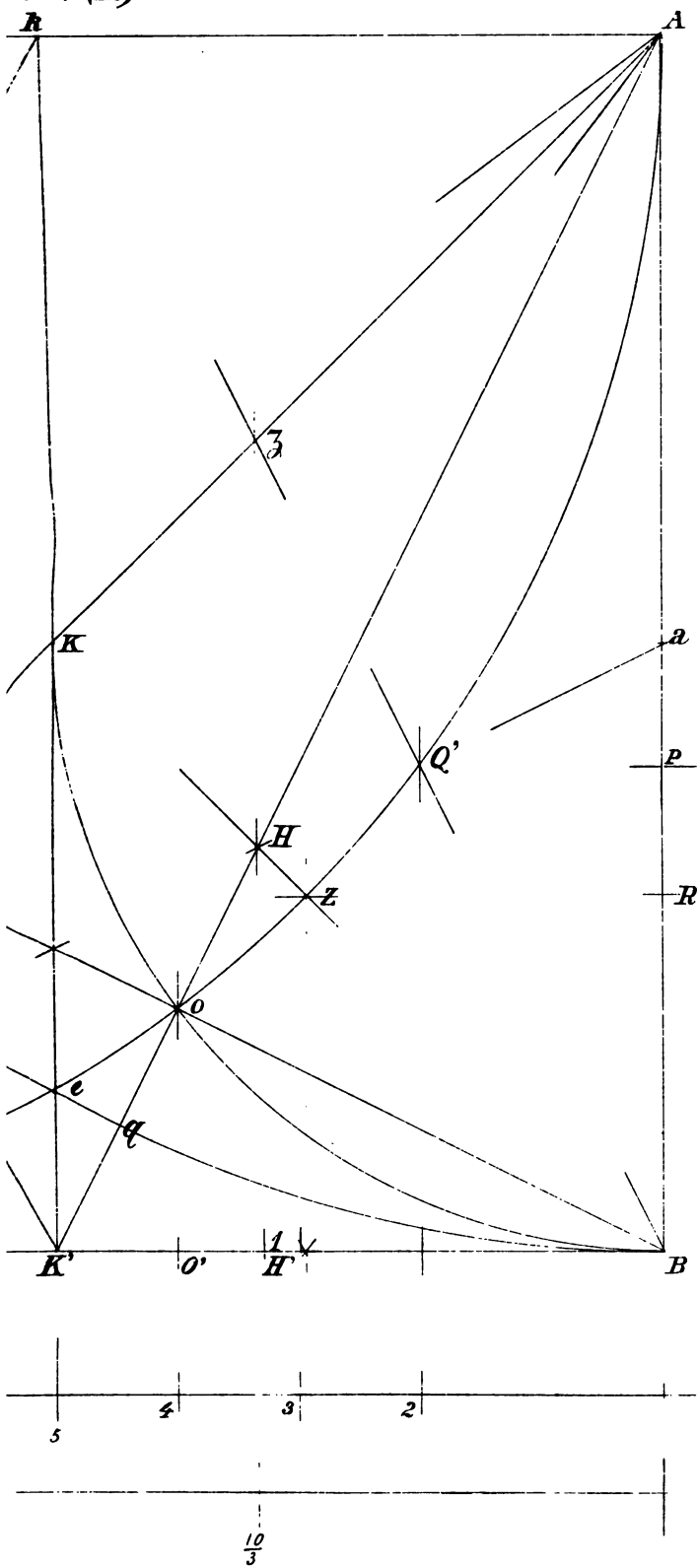
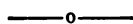


Plate 26.

FIG. 26.

Decimal Circles ; and decimal relation of the versed sine
to the radius of Octant.

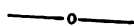


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Plate 27.

FIG. 31.

Analysis of the Circle.



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Plate 28.

FIG. 32.

Analysis of the Circle.

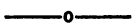
—o—

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Plate 28.

FIG. 32.

Analysis of the Circle.

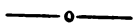


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Plate 29.

FIG. 33.

Analysis of the Circle.



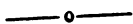
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Plate 29.

FIG. 33.

Analysis of the Circle.

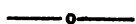


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Plate 30.

FIG. 34.

Analysis of the Circle.

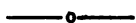


PART FOURTH, Pages 19 and 20.

Plate 30.

FIG. 34.

Analysis of the Circle.



PART FOURTH, Pages 19 and 20.



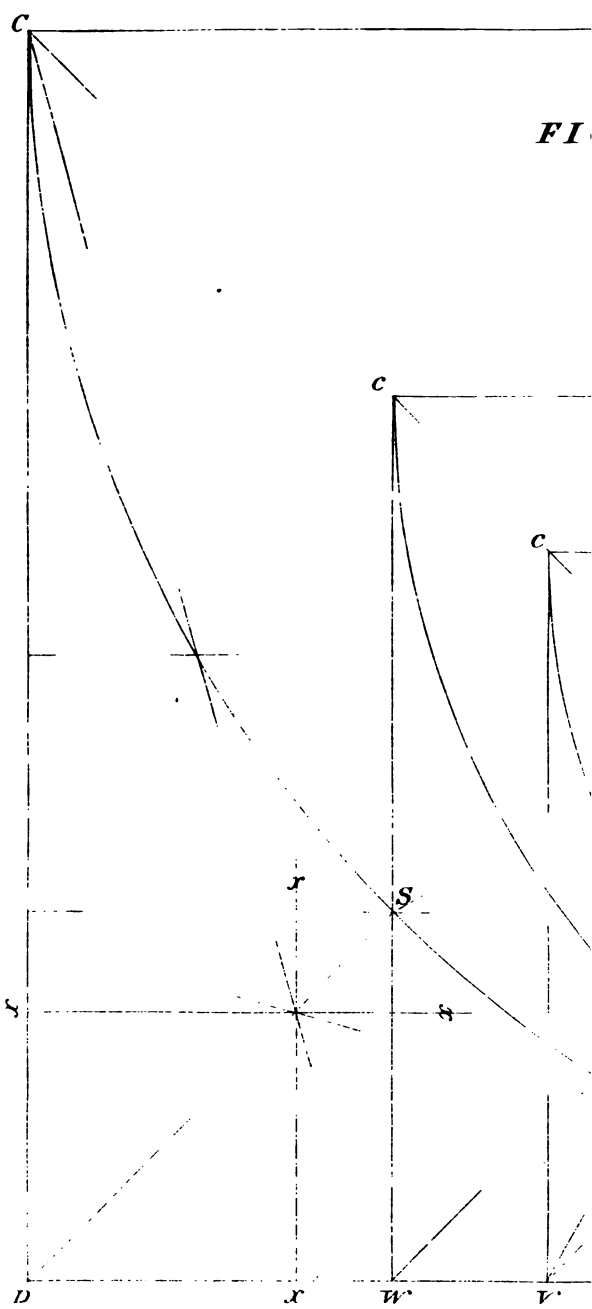
Plate 31.

FIG. 35, (A.)

Analytical method by decimal Circles.

—o—

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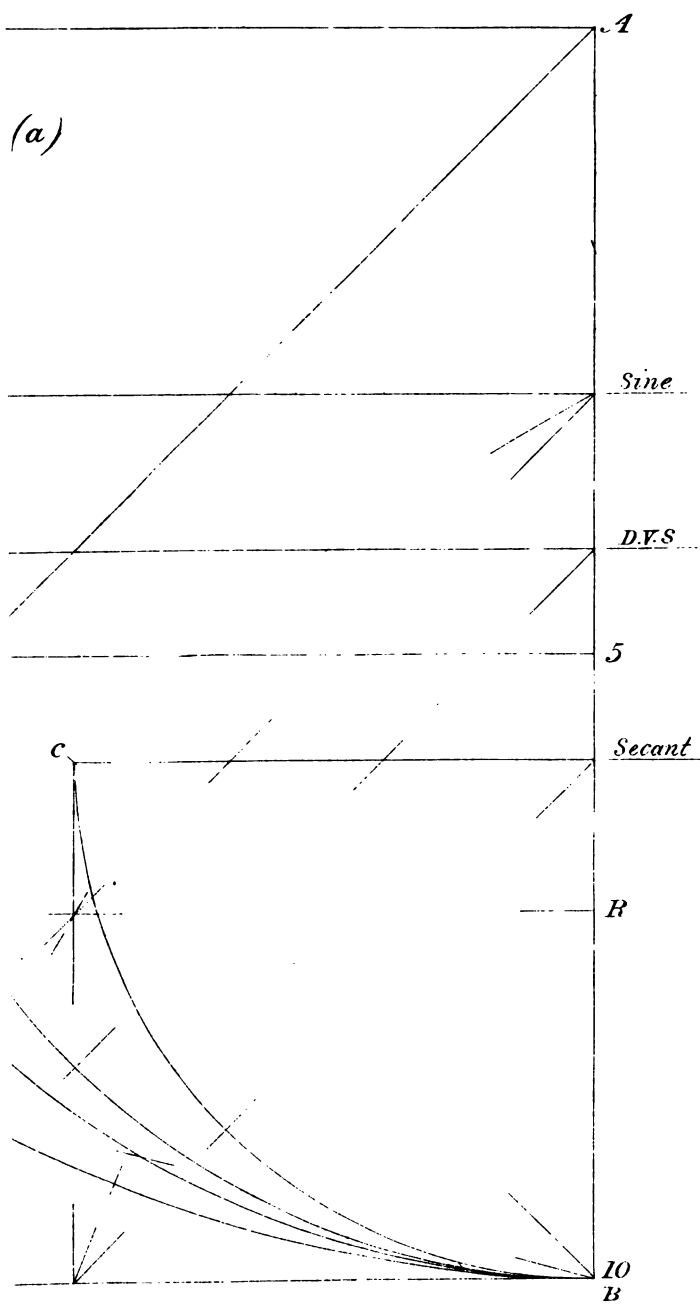


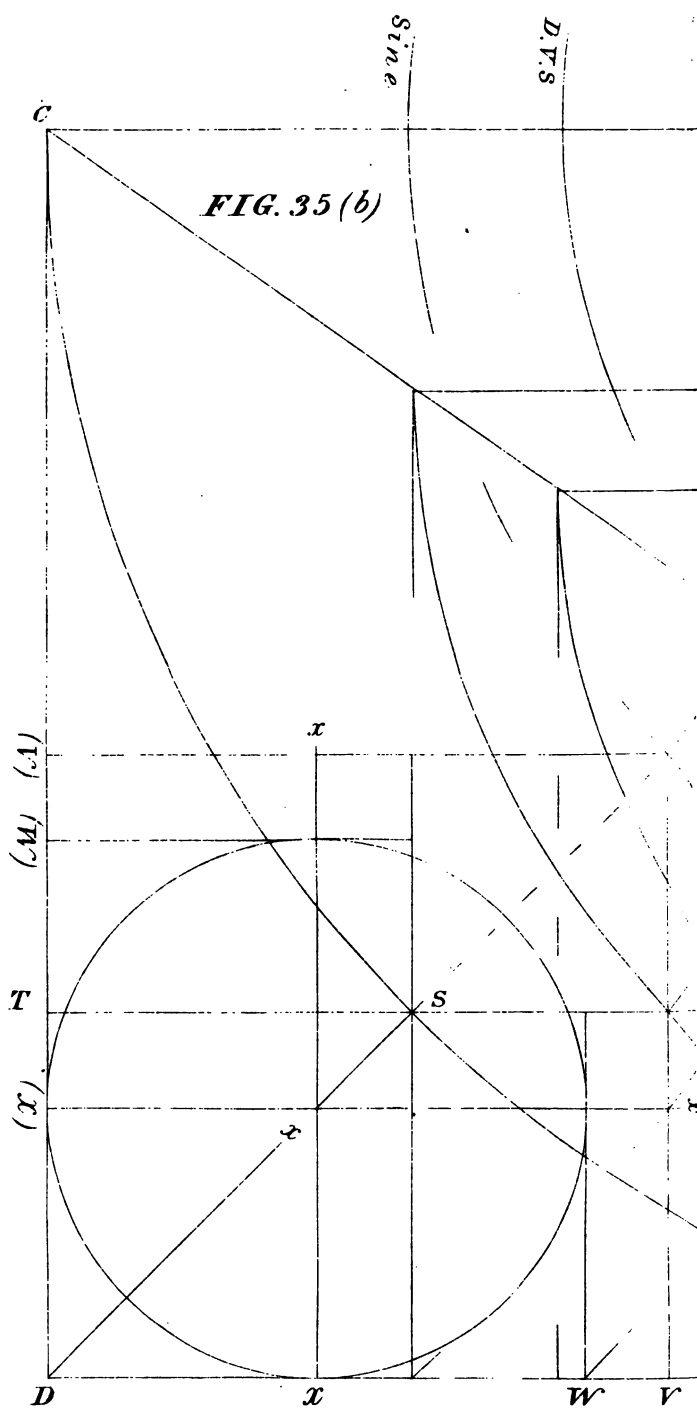
Plate 32.

FIG. 35, (B.)

Analytical method by decimal Circles.

—o—

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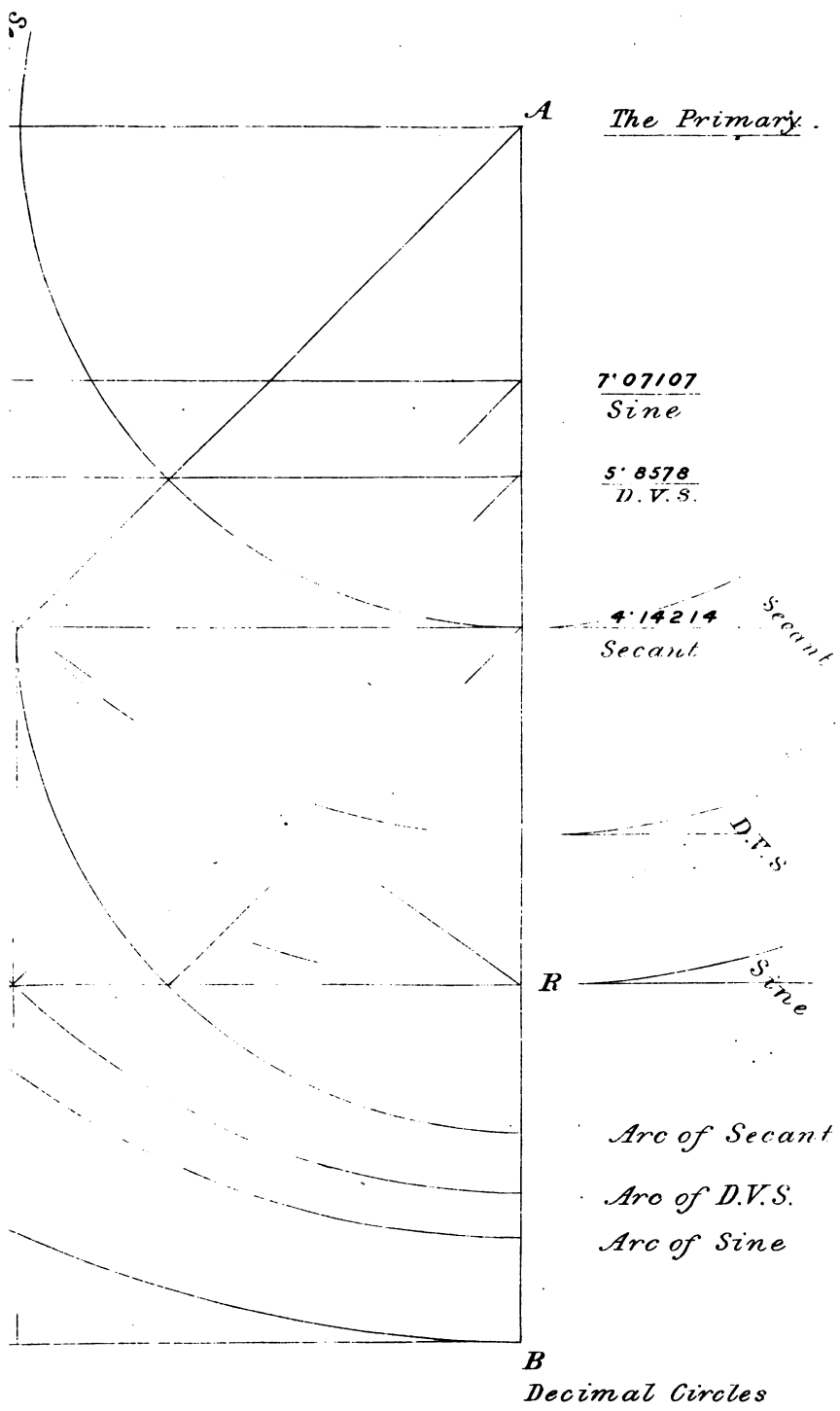


Plate 33.

FIG. 36.

Illustrating the relations of certain triangles and squares
belonging to the Circle.

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PART FOURTH, page 30.

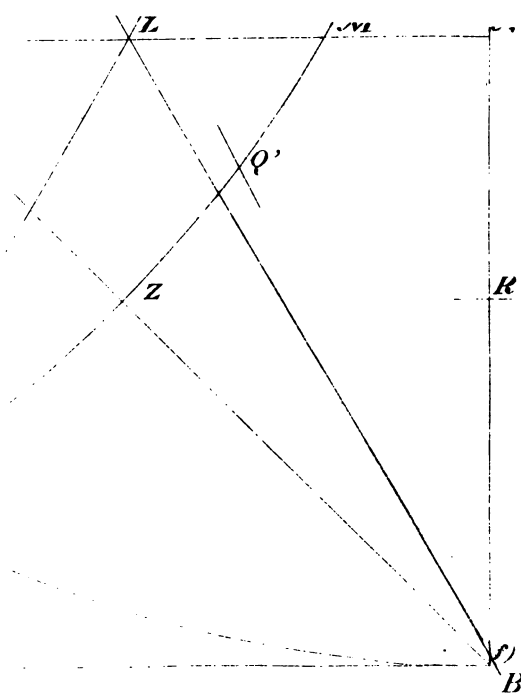




Plate.

FIG. 39.

The Cyclal Arc of Curvature, the Cyclal Arc of the Increasing Sine, the Arc of the Arc-length, and the Arc of the Ultimate Sine.

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PART THIRD. *Appendix.*

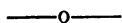
The Cycle of decurvature

The Cyclical arc of decurvature

Plate.

FIG. 40.

The Correlation of the Sine and Arc-length of the
half Octant.



PART THIRD. *Appendix.*

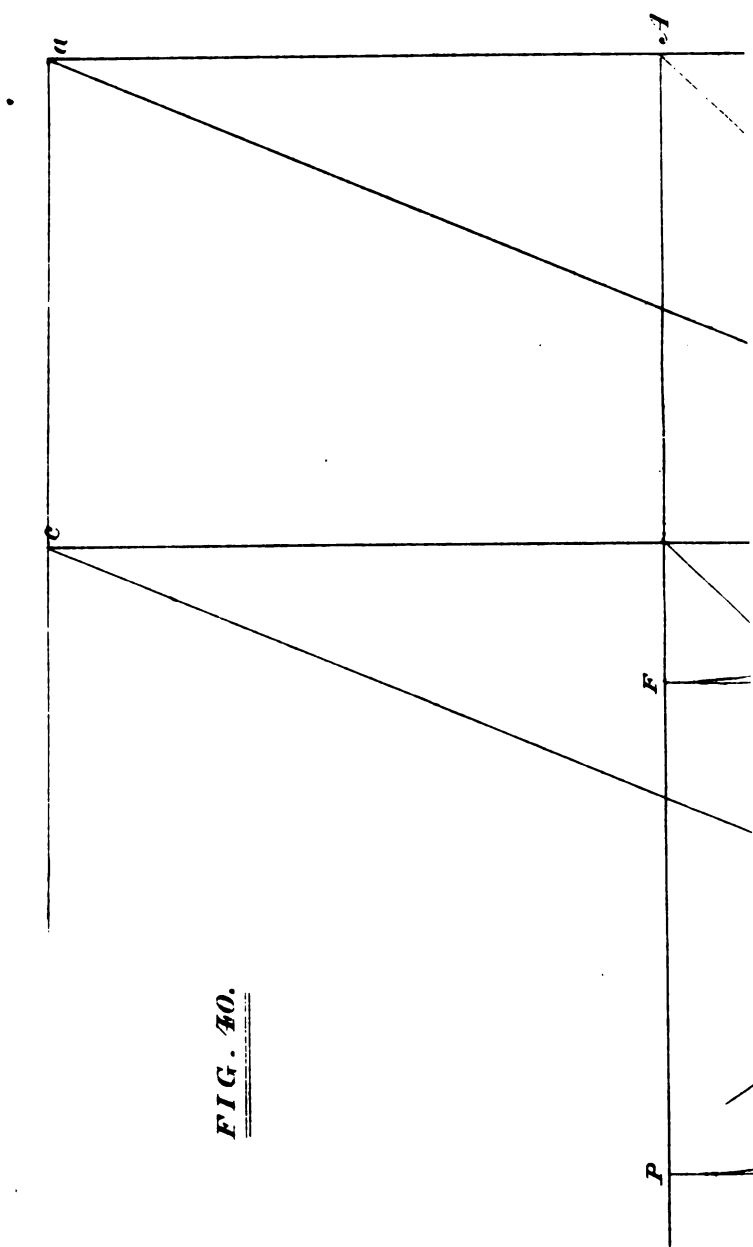


FIG. 40.





